FIRELINE LEADERSHIP IN THE BRAVE NEW WORLD OF WEATHER MODIFICATION & MODERN WILDLAND FIRE BEHAVIOR

Keep Informed on Fire Weather Conditions and Obtain Forecasts

Base All Actions on Current and Expected Fire Behavior

Unfamiliar with Weather and Local Factors Influencing Fire Behavior

LEARNING NEW INDICATORS

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INTRODUCTION

It's almost ten years ago to the day that I wrote a similar paper and made a similar presentation to my esteemed Hot Shot colleagues. My goal is to hopefully educate you all about a very real, very disturbing phenomenon occurring worldwide on a daily basis. In fact NOAA readily admits to over fifty (50) on-going **Weather Modification** projects occurring in the United States today. This doesn't include what "The Government," the military, and…(others)…are doing. Weather Modification affects us all. I bet it's safe to say you often look at clouds and think they look artificial or you just know they are not real.

The very first **Fire Order** is "**Keep Informed on Fire Weather Conditions and Forecasts**." So by extension, Weather Modification affects us as Fireline Supervisors, because weather influences fire behavior. The most unpredictable element of weather is, of course, the wind. Many of the Weather Modification projects radically affect the wind, especially HAARP, so much of the following information is about other weather and the new indicators you'll need to watch for. And please note that ***not all the information presented in this paper deals with "weather modification," per se.***

My goal is to show you, among other things, what **indicators** to look for – in the clouds and in the smoke columns. Wildland Firefighting is risky enough, without Weather Modification. The weather is fairly unpredictable as it is. When I was growing up, with few exceptions, "The Weatherman" was almost always correct in his forecasts. (Back in the day, they *were* all men). If he said it was going to be a sunny day, well it was a sunny day, and if he said it was going to rain it actually rained, just like he said it would. Nowadays, the poor weathermen and women have a fairly rough time trying to get it right and readily admit they can't give you an accurate forecast more than fives days out. And what about all the times that you hear these words relating to weather - "**unpredicted**" or "**rare**" or "**unusual**" or one of my favorites, "**without warning**." Our meteorologists and other weather folks have some of the most sophisticated weather-predicting and weather-observing instruments in history, e.g. Doppler radar, satellites, and the like, yet we often hear these words especially as they relate to tornadoes and severe storms. These "events" seemingly just appear out of nowhere "without warning." I contend it's not all their fault.

You're going to learn that "The Weatherman," NOAA, meteorologists, and others, including FBAN's, cannot be held liable or responsible for faulty or inaccurate weather and/or fire behavior forecasts - period. Where does that put us? The same place we've always been as Fireline Supervisors, especially as IHC Superintendents and Foremen – on our own. No matter what the issue – driving, HazMat, Work-Rest, fireline safety, and now WEATHER and FIRE BEHAVIOR– it falls squarely onto Fireline Supervisors.

I don't know about you, but as a Fireline Supervisor, I want the best "edge" that I can have regarding the weather when working wildland fires, and so like you, I've been using clouds as my primary indicators. You have to admit though, the clouds have "changed" a lot over the years; now we need to recognize those that are

artificial or modified. If you don't want to learn this stuff because you think it's too bizarre or you're incredulous for some reason, then get one of "the kids" to read it and research the links and such, and they can "lead up" to you. Moreover, I don't believe in evolution, so if you see it used in the paper, it's not from me. Neither do I believe in global warming; climate change, yes.

You're going to learn something…known as "persistent spreading contrails." You're going to learn a great deal about Ionospheric Heating technology, namely the High Frequency Active Auroral Research Project (HAARP), and how it relates to altering the weather, namely the winds…(Jets leaving persistent jet contrails)…occurs almost everyday – worldwide – especially when there are storms approaching. I think recognizing HAARP is a bit more difficult, and more important.

According to Zimmerman and Holliday and Zimmerman, in the Hamilton, Ontario, Canada area: "Almost daily, planes can be observed **lacing the skies** with what ***initially appear*** as normal jet contrails, but **linger and slowly diffuse into a layer of cirrus cloud formations and finally finish as a lingering haze**. This **atmospheric mist** then appears to act as a blanket reflecting, diffracting, and refracting incoming solar radiation occasionally causing ***abnormal*** rainbow-like rings to form around the sun and the moon."

Persisting Jet Contrails "…are generally non-symmetrical, irregular-shaped, x-markings, dashes, curved, U-shaped, sweeping, criss-cross, and sometimes in rough grid-like patterns during heavy spray occurrences. They will spray to fill in open gaps in the clouds. They may at times virtually cover the skies. These will persist for hours to days, depending on winds aloft.

HAARP clouds, on the other hand, are very symmetrical; either in rays of 3 to 5 or more; distinct and even lines, grid-lines, and/or distinct and even, grid-like patterns; holes, symmetrical waves; long, narrow, straight and/or long tubular clouds; slices; sweeping slices, and the like. They are fleeting and/or short-lived, lasting for only a few minutes.

HAARP-like modulations will cause "***perturbations***" or irregularity in the motion or orbit of a heavenly body caused by some force other than that which is normal. Edward Boyle, a professor of oceanography at MIT, in an article titled "*Don't like the weather? Change it,*" says "there's a real sense that the ***climate system*** is complicated enough and ***if you start messing with it you'll get an outcome you didn't expect enough.***"

WHY are "they" doing all this you ask?

Several arguments abound - specifically:

(**1**) Preventing or modifying alleged global warming,

(**2**) Lessening the amount of moisture by spraying prior to storms,

(**3**) Along with less rain, encouraging using biogenetic seeds,

(**4**) U.S. Government has been experimenting on the general public since the 1940's,

(**5**) Military, University, and Scientific experimentation, research, and development, so nothing new on those two…

(**6**) Ephesians 6:12. I really don't know why, but "they" do. It really doesn't matter, does it? You will learn that it's occurring in our country and worldwide every day. It's affecting our weather and our health, and I contend that it has a definite, adverse effect on modern wildland fire behavior. So just deal with it and start paying attention. Press on with your own research if you don't accept mine. May I suggest, you'll come to the same conclusions in the end.

So then, read on and research, objectively and subjectively. I guarantee using this paper electronically, following links, will be a good start, and it ***will*** "Open Your Mind."

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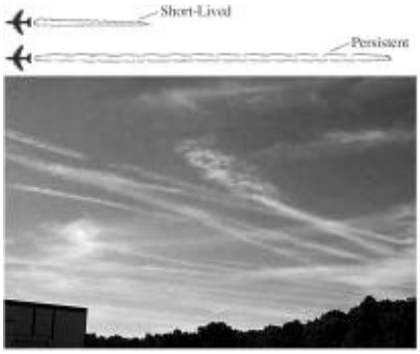
CONTRAILS, PERSISTENT and SPREADING

"…In 1996, NASA's Subsonic Aircraft Contrail and Cloud Effects Special Project (SUCCESS), used aircraft to "**form their own contrails** and then they would study them close up." They flew into the contrails to capture and analyze "aerosols," very small particles on which ice crystals form, thus "**producing cirrus clouds.**"

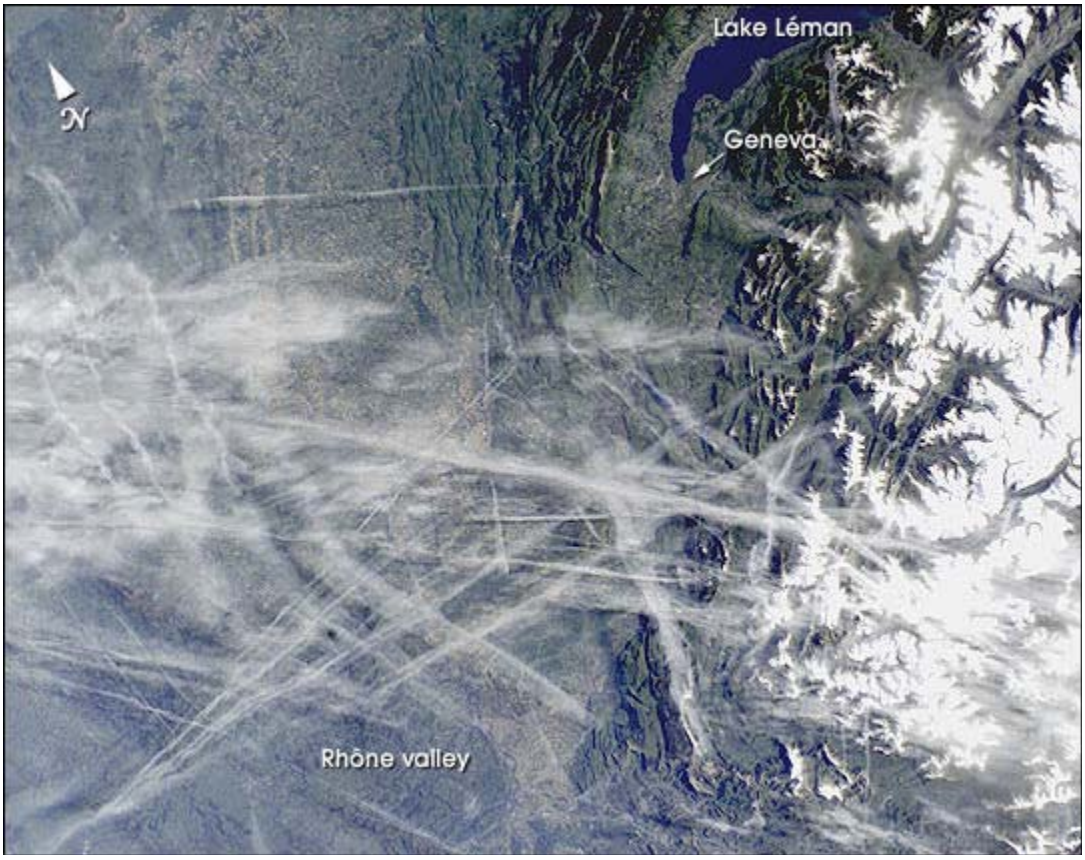
And even more amazing, they "**formed contrails into easily noticeable shapes, ovals**, and tracked them by satellites for long periods." This is still occurring today worldwide. Yet they also claim the clouds formed themselves into odd shapes in other documents.

Go to the NASA "**GLOBAL CONTRAIL ID CHART**" – International and in several languages at http://asd-www.larc.nasa.gov/GLOBE/resources/efs_cloud_id.pdf , they distinguish between "**short-lived**," "**persistent**," and "**persistent spreading**" contrails. It's interesting that a month ago (December 2007) this was merely a "Contrail ID Chart" but it's now a "Global" ID chart. Why the international change I wonder? You'll see.



"Spreading persistent contrails" (98) "Contrails" - NOAA - Flagstaff, AZ (03)

The above photos are from NASA **S'COOL** Online, a children's "educational" program that discusses "contrail science" in these particular issues. That's nice. They're teaching the children at a young age to believe their lies and not to believe their parents and family. DO THEY TELL THEM WHAT'S ACTUALLY IN THE "CONTRAILS?"



This is a digital photograph of "contrails" taken through the windows of the Intl. Space Station over Eastern France.

Unfortunately we're seeing this more and more all the time and so some people consider it almost "**normal**" anymore. The Government certainly does. "Normal" weather is defined by climatologists as that which has been experienced in the previous three decades. We're getting there, but I don't want to consider all of this as "normal."

If they're flying like this, and they will, you **WILL** have cloudy days – guaranteed!

The Alleged "Chemtrail" Hoax according to the Air Force

A hoax that has been around since 1996 accuses the Air Force of being involved in spraying the US population with mysterious substances and shows various Air Force aircraft "releasing sprays" or generating unusual contrail patterns. Several authors cite an Air University research paper titled "**Weather as a Force Multiplier: Owning the Weather in 2025**", http://www.fas.org/spp/military/docops/usaf/2025/v3c15/v3c15-1.htm alleging that the military is engaging in weather modification experiments.

The Air Force contends the purpose of that paper was part of a thesis to outline a strategy for the use of a **future weather modification system** to achieve military objectives and **it does not reflect current military policy, practice, or capability**. The Air Force's policy is to observe and forecast the weather and it is focused on observing and forecasting the weather so the information can be used to support military operations. They adamantly claim: "**The Air Force is not conducting any weather modification experiments or programs and has no plans to do so in the future."** The Air Force further claims the "Chemtrail" hoax has been investigated and refuted by others in established and accredited universities, scientific organizations, and major media publications. According to the SASS (Subsonic Assessment Program) webpage:

Claims and Facts

Claim: Long-lasting contrails are something new and they have abnormal characteristics.

Fact: Contrails can **remain visible for very long periods of time** with the lifetime a function of the temperature, humidity, winds, and aircraft exhaust characteristics. **Contrails can form many shapes** because of horizontal and vertical wind shear. Sunlight can produce vibrant and eye-catching colors and patterns. Observation and scientific analysis of contrails and their duration date back to at least 1953. Only pilots can make the bizarre shapes – the clouds and weather don't make their own shapes!

Claim: Contrail grid patterns in the sky are evidence of a systematic spraying operation.

Fact: The National Airspace System of the US is orientated in an east-west and north-south grid with aircraft flying at designated 2000 foot increments of elevation. Contrails formed by aircraft may appear to form a grid as the winds disperse the contrails. **More contrails are seen in recent years** due to the growth in the civil aviation market. The FAA is responsible for the NAS and Air Force aircraft operate under the same rules and procedures as civilian aircraft when using the NAS. Because they're spraying them, somewhere, worldwide, everyday, especially when storms are approaching so they're becoming "normal" in their opinion!

Claim: There are reported outbreaks of illness after the appearance of "Chemtrails"

Fact: There is no such thing as a "Chemtrail". Contrails are safe and are a natural phenomenon. They pose no health hazard of any kind. If there are massive outbreaks of illnesses, your local health department should be able to tell you if it is an abnormal event. Local health departments generally network together when they start seeing problems. If there is a problem, the CDC will get involved. There are a lot more "unexplained" ailments and illnesses!

Claim: Samples taken have shown the presence of the "DOD patented" bacteria pseudomonas fluorescens.

Fact: The bacteria claimed to be DOD developed and patented is actually a common, naturally occurring bacteria. The U.S. Patent Office lists 181 patents involving pseudomonas fluorescens, none of which are **held** by DOD. Okay, DOD didn't develop, patent, or hold patents, but DOD uses them!

You be the judge. Do you really trust what the Government tells you anymore? Or what the "news readers" tell you based on Government-approved news releases?

Another group disputing "chemtrails" remembers, ***"We often said that we created weather over Europe. They would persist for many hours, maybe days"***; Willard Reese, 457th Bomber Group, WWII Vets that challenge the existence of chemtrails; jet fuel then was heavily lead-based, http://www.goodsky.homestead.com/files/deception5.html

EFFECTS of CONTRAILS, PERSISTENT and/or SPREADING and/or CHEMTRAILS

- **Guaranteed**, when "**they**" are flying and spraying, **you WILL have cloudy skies**, depending on winds aloft, for at least some of the day or night, because they do spray at night. This will occur no matter what the IMET tells you or what your Fire Weather forecast indicates – **guaranteed** – especially during persistent spreading contrail episodes.

- Given the above, you **may** have somewhat reduced fire behavior during the day, albeit short-lived at times, because of the **guaranteed cloud cover** for some or most or all day or night, depending on winds aloft; sometimes they last all day.

- Conversely, your night-time fire behavior **may** be more active under warmer, cloudy skies because of little and/or no Fuel Moisture Recovery. They spray often at night.

- You **may** experience hotter burning fires in certain areas because of the **metals** being sprayed, e.g. **aluminum, magnesium, and strontium**, settling onto the fuels, especially in/adjacent to military bases and/or heavy or recurring spray areas.

- You and your Crew **may** experience *unusual* illnesses or ailments as you work areas where the **fuels and/or soils,** permeated with these sprayed metals begin to burn and consume, emitting noxious smoke and fumes, especially next to military bases with aircraft and along military flight paths.

- You and your Crew **may** experience more illnesses and ailments, especially if you're exposed to the open skies during heavy spray days and/or nights.

Simply stated…" (Persistent Jet Contrails)."…**and HAARP clouds are apples and oranges**. Yes, they may occur at the same time, and the last for hours, they often do. MOST of the "chemtrail" websites and/or YouTube.com or LiveLeak.com videos innocently and mistakenly include all the strange, man-made, unexplainable clouds as "chemtrails" – they're not all "chemtrails." I promise you that by the time you're done reading this paper, researching the many links – AND LOOKING UP AND SEEING WHAT'S GOING ON IN OUR SKIES - ON A REGULAR BASIS, you will be able to tell the difference. I promise!

So, who are "they?" Who's doing all this you ask? It's definitely "the Government" and not just ours, the military for sure, even though they deny it, and probably Government contractors. Sure there are scores of commercial Weather Modification companies, mostly doing cloud-seeding, but that's not really what this paper is about, even though their operations can adversely affect your operations as you'll see. Let's just say there are a lot of people doing this, and most of them must know that what they're doing is wrong or questionable, and they just aren't allowed to talk about it because they are just "doing their job" or in the case of the military, "just following orders." There are always those that just may be ignorant. And, of course, there are those malevolent others…

HIGH FREQUENCY ACTIVE AURORAL RESEARCH PROJECT (HAARP)

One of the best HAARP primers is Nick Begich's and others' "***Hole in Heaven***" video clip, about an hour.

HAARP technology is quite simply, an Ionospheric Heater utilizing "**electron cyclotron resonance**" – meaning it creates vortices. It is often euphemistically referred to as "***ionospheric enhancement technology***."

Physicist, Inventor, Patent Designer, and Eastlund Scientific Enterprises Corporation Owner, Bernard Eastlund, originator of HAARP technology, following Tesla technology, firmly believes that "you can **virtually lift part of the atmosphere. You can make it move, do things to it**, and you're able to intensify and control light [and therefore] one could **heat a specific part of the earth** and learn to **manipulate local weather patterns**." He says "by beaming huge amounts of electromagnetic energy to selected regions of the upper atmosphere with this technology, one could perform some truly amazing feats … even **change global weather patterns**."

HAARP is presently managed by the Air Force, Navy, University of Alaska, and the Raytheon Corporation. The Air Force uses its various bases to mange different functions of the program. Hanscom Air Force Base (AFB) runs the public information section, Kirkland AFB manages the information distribution, Maxwell AFB develops doctrine and policy for non-lethal weapons systems, and Brook AFB puts together research for bio-effects of Radio-Frequency (RF) radiation. HAARP is being managed as a "proof-of-concept" project for the military, the step just prior to full weapons system development.

In 2004, The Science Channel, on a special television program titled 'Owning the Weather,' conducted an interview with Mr. J. Gregory Glenn, a Research Scientist at Elgin AFB and he basically acknowledged "Air Force weapons researchers and nano-particles specialists are conducting weather experiments …"

UCLA, Stanford University, Penn State, and the University of Alaska worked on the program in 1996. Industry contributors included the Atlantic Richfield Corporation (ARCO) through ARCO Power Technologies, Inc. (APTI), a subsidiary. E-Systems bought APTI and it was then acquired by the Raytheon Corporation in a huge buyout. The original HAARP was part of the larger Strategic Defense Initiative, better know as "The Star Wars Initiative"

There are actually many of these Ionospheric Heaters word-wide and the technology dates back to the early 1970's with the Soviet Union, and the infamous "Woodpecker Project." This cooperative global effort boasts systems in the USSR, Canada, Japan, Greenland, Norway, Finland, New Zealand, and other countries. HAARP technology is far-and-away a much more advanced system and there are several of them word-wide as well. They are located in Arecibo, Puerto Rico and Fairbanks, Alaska [High Power Auroral Stimulation – HIAPAS] in the US. Other HAARP-like facilities are located in Tromso, Norway; Moscow, Nizhny Novgorod, and Apatity, Russia; and Kharov, Ukraine and Dushanbe, Tadzhikistan.

Using a 36-acre antennae base, capable of 10,000 watts each at full power, only the HAARP system in Gokana, Alaska has the power potential and beam steering capabilities to focus its powerful beam specifically on its intended target with up to **3.6 GIGAWATTS** of **effective radiated power (EFR).** According to author, researcher, and physicist Nick Begich, it is planned to achieve **4,700,000,000 (4 billion seven hundred million) up to 10,000,000,000 (10 billion) watts of ERP**. Furthermore, utilizing the "**electron cyclotrone resonance heating effect**" HAARP is able to deliver **one watt per cubic centimeter**, compared to other technologies that only deliver one-millionth of one watt."

Probably the best visual education for HAARP is the GOES Hot Stuff, "Complex Clouds off San Francisco Bay, California." It's a very "busy" scene replete with HAARP activity. You'll have to view it several times and focus on different quadrants each time.

Complex clouds off [San Francisco Bay] California; February 1, 2000, http://goes.gsfc.nasa.gov/text/hotstuff.html, ***BIZARRE*** HAARP grids and grid-lines are **EXTREMELY OBVIOUS** even with somewhat grainy black and white photo satellite imagery; NOAA claims these are "Clouds of many kinds and heights [and they] move [and] evolve in this one movie." Yeah right! "Evolve?" No, someone ***created*** these.

An Air Force study, completed in 1996, titled *Air Force 2025*, refers to a paper titled ***Weather as a Force Multiplier: Owning the Weather in 2025***. It is a chilling document. The authors think of our environment as nothing more than a resource to be "*exploited* " [they like that word] for military purposes. They claim that by 2025, the US military can "***own the weather***" by "capitalizing on emerging technologies and focusing

development of those technologies to war-fighting applications [and] by 2025, it ***may*** be possible to **modify the ionosphere** and near space, creating a variety of potential applications." I'm here to tell you that it's here - now! We don't even have to wait until 2025.

August 19, 2007 over Los Angeles - Taken from Contrail Science website (see endnotes, references)

The "hole" in this cloud is from being HAARP-induced. It is NOT a "contrail..." You've seen what "persistent contrails" look like, now you'll need to focus on these HAARP clouds. IT'S THE **HAARP CLOUDS THAT HAVE THE MOST INFLUENCE ON WILDLAND FIRES, to wit, THE WINDS.**

And you'll see a very similar looking "hole" cloud in Istanbul/Gokteki Delik in November 2006. http://www.youtube.com/watch?v=QHJdbd7XCt8 . And another eerily similar looking "hole" cloud in Turkey in December 2006, http://www.youtube.com/watch?v=yGSmBfnqHp8 , not to be outdone by a very similar "hole" cloud in Baexem, Holland in November 2006, http://www.youtube.com/watch?v=yGSmBfnqHp8

According to science journalist Bill Sweetman, the Air Force stated in a DOD contractor's supplement to the National Industrial Security Program manual that "**draft cover stories must be believable and cannot reveal any information regarding the true nature of the contract**." Moreover, a Phillips Laboratory and Office of Naval Research report stated "**the appearance of any material herein does not constitute publication**." That's a bit Orwellian wouldn't you think! Nick Begich intuitively asks, "how do you print a pile of documents 613 pages thick, and say it 'does not constitute publication'?"

photo credit: Martha Tenney) Dark Roasted Blend

This is definitely a HAARP-induced cloud. According to Dr. Rosalie Bertell, HAARP can make "***long incisions*** in the Earth's atmosphere." This is very common during HAARP pulsing, lasting a few minutes. You will also see this in the smoke columns.

Anti-crepuscular rays in the east opposite the setting sun – March 3, 2004 – Washington State -Leigh Hilbert *(site)*
From Atmospheric Optics, UK website

These are **definitely** HAARP-influenced clouds, even though the photographer, NOAA, and others classify them as "anticrepuscular rays." These HAARP-rays will only last for a few minutes at most three to four rays common.

Smoke from large fires obscured much of Alaska and Canada's Yukon Territory on August 22, 2004. Fires (locations in red) and smoke from satellites. (NASA image courtesy MODIS Rapid Response Team.) Beitler, Jane; NASA Earth Observatory, October 17, 2006: http://earthobservatory.nasa.gov/Study/ContributionPollution

There are numerous, clearly visible HAARP grid-lines and "slices" in the smoke – definitely weather modification occurring here.

YouTube.com Video Clips with Some Chemtrail, Mostly HAARP Activity (BOLD) titles are best!

Go to YouTube.com, then "search" for name, i.e. "**geoamerican911**", add title of clip; many similar links follow; some of these subscribers have dropped out of YouTube.com, so if you cannot find the video after searching a few times with different words, just move on to another.

piasillo Sunday NY 6 min – good shots and progression w/commentary

piasillo attack 10 min

wxnut over Oklahoma 4 min

googlepolice chemical clouds 4 min

stormchaseramarillo – ***UNBELIEVABLE*** mammatus clouds 1 ½ min

ritchie cloud layers mammatus clouds

geoamerican911 - double funnel cloud 13 seconds **VERY GOOD**

tornadovideonet - incredible tornado 3 min

akrhez gravity wave 30 sec

akherz tama undular bore II HAARP slicing gravity wave 24 sec

korneld coolest clouds ever

flax x388 frightening sky HAARP 1 min

bobitchq scary storm coming HAARP

PaPookie weird cloud formation channel of air tubular cloud 9 sec

aidynsdaddy strange cloud tube-like 2 min

strawna weird storm cloud HAARP twisting 37 sec

wxbum stunning shelf cloud storm 1 ½ min

noitevnok mammmatus and arcus shelf cloud HAARP slice 1 ½ min

chase57 tx the haboob HAARP slices stacked

JohnJohn get inside greenish clouds with HAARP slice 18 sec

jarvisa2002 Funnel Cloud #2 green tornado clouds

slayernumero 2 fire tornadoes from forest fire Part 2 1 ½ min

slayernumero 2 fire tornadoes Part 1 1 ½ min

MsnAngersMe The Sentosa Phenomenon 30 sec – VERY strange

Staticbrain HAARP 10 minutes

Biggoetz HAARP 42 seconds

Bourrex HAARP CBC Broadcast 7 minutes

Vrilian Square Clouds 4 min

Skywitness Scalar Activity 2 ½ min

Smileycoyote (scalar Energy Vortex) 5 min

Mdgg2009 chemtrails in the sky chemtrails w/ spiral HAARP 3 ½ min

Freddyderfrosh HAARP

Gunman RAC chemtrails HAARP 1 min

rewindme - doesn't anyone notice chemtrails

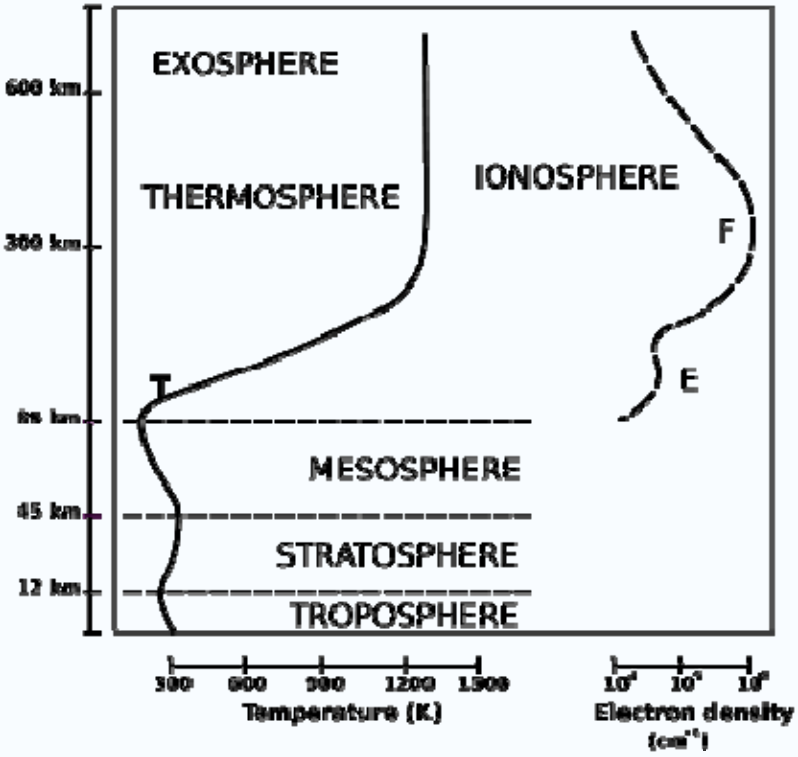
thetruthjustice – sun won't come out HAARP

dpettyjohn 3 firefighting safety rules 30 sec (okay, so it's not about weather)

Moreover, check out the **strange "lenticular" clouds** from Dark Roasted Blend and also by scrolling down to "3. *The Witches Brew of Bizarre Clouds*." To be sure, most if not all of them are HAARP in that particular series. Click here, Lenticular Clouds Gallery

The Ionosphere

This Ionosphere and Atmosphere section is educational since you're probably treading new ground here, and you'll need to know what we're referring to.



The **ionosphere** is the **uppermost** part of the atmosphere, distinguished because it is ionized by solar radiation. It plays an important part in atmospheric electricity and forms the inner edge of the magnetosphere. Located in the Thermosphere., it has practical importance because it also influences radio propagation to distant places on the Earth.

Geophysics

The lowest part of the Earth's atmosphere is called the troposphere and it extends from the surface up to about 6 miles. The atmosphere above 6 miles is called the stratosphere, followed by the mesosphere. It is in the stratosphere that incoming solar radiation creates the ozone layer. At heights of above 50 miles, in the thermosphere, the atmosphere is so thin that free electrons can exist for short periods of time before they are captured by a nearby positive ion. The number of these free electrons is sufficient to affect radio propagation. **This portion of the atmosphere is *ionized* and contains a plasma which is referred to as the ionosphere.** In a plasma, the negative free electrons and the positive ions are attracted to each other by the electromagnetic force, but they are too energetic to stay fixed together in an electrically neutral molecule.

Troposphere: From the Greek word "τρέπω" meaning to turn or change. The troposphere is the **lowest layer of the atmosphere**; it begins at the surface and extends to **between 7 km (23,000 ft) at the poles and 17 km (60,000 ft) at the equator**, with some variation due to weather factors. The troposphere has a **great deal of vertical mixing due to solar heating at the surface**. This heating warms air masses, which makes them less

dense so they rise. When an air mass rises, the pressure upon it decreases so it expands, doing work against the opposing pressure of the surrounding air. As the temperature decreases, water vapor in the air mass may condense or solidify, releasing latent heat that further uplifts the air mass. This process determines the maximum rate of decline of temperature with height, called the adiabatic lapse rate. It contains roughly 80% of the total mass of the atmosphere. 50% of the total mass of the atmosphere is located in the lower 5km of the troposphere.

The average temperature of the atmosphere at the surface of Earth is 15 °C or 59 °F.

Solar radiation at ultraviolet (UV) and shorter X-Ray wavelengths is considered to be *ionizing* since photons at these frequencies are capable of dislodging an electron from a neutral gas atom or molecule during a collision. At the same time, however, an opposing process called recombination begins to take place in which a free electron is "captured" by a positive ion if it moves close enough to it. As the gas density increases at lower altitudes, the recombination process **accelerates** since the gas molecules and ions are closer together. The point of balance between these two processes determines the degree of ionization present at any given time.

The ionization depends primarily on the Sun and its activity. The amount of ionization in the ionosphere varies greatly with the amount of radiation received from the sun. There are also **mechanisms that disturb the ionosphere and decrease the ionization**. There are disturbances such as solar flares and the associated release of charged particles into the solar wind which reaches the Earth and interacts with its geomagnetic field.

The Ionospheric Layers

Solar radiation, acting on the different compositions of the atmosphere with height, generates layers of ionization:

D Layer

The D layer is the **innermost layer**, 50 km to 90 km above the surface of the Earth. Ionization here is due to Lyman series-alpha hydrogen radiation at a wavelength of 121.5 nanometer (nm) ionizing nitric oxide (NO). … Recombination is high in this layer, thus the net ionization effect is very low and as a result high-frequency (HF) radio waves aren't reflected by the D layer. **The frequency of collision between electrons and other particles in this region during the day is about 10 million collisions per second**. The D layer is mainly responsible for absorption of HF radio waves, particularly at 10 MHz and below, with progressively smaller absorption as the frequency gets higher. … A common example of the D layer in action is the disappearance of distant AM broadcast band stations in the daytime.

E Layer

The E layer is the **middle layer**, 90 km to 120 km above the surface of the Earth. Ionization is due to soft X-ray (1-10 nm) and far ultraviolet (UV) solar radiation ionization of molecular oxygen (O_2). This layer can only reflect radio waves having frequencies less than about 10 MHz. It has a negative effect on frequencies above 10 MHz due to its partial absorption of these waves. The vertical structure of the E layer is primarily determined by the competing effects of ionization and recombination. … Diurnal changes in the high altitude neutral winds play a role. The increase in the height of the E layer maximum increases the range to which radio waves can travel by reflection from the layer.

This region is also known as the Kennelly-Heaviside Layer layer or simply the Heaviside layer. Its existence was predicted in 1902, however, it was not until 1924 that its existence was detected.

E_S

The E_s layer or sporadic E-layer. Sporadic E propagation is characterized by **small clouds of intense ionization**, which can support radio wave reflections from 25 – 225 MHz. Sporadic-E events may last for just a few minutes to several hours and make radio amateurs very excited, as propagation paths which are generally unreachable, can open up. This propagation occurs most frequently during the summer months with major occurrences during the summer, and minor occurrences during the winter. The skip distances are generally around 1000km (620 miles). VHF TV and FM broadcast DX'ers get excited as their signals can be bounced back to earth by Es. Distances for short hop events can be as close as 500 miles or up to 1,400 (or more) for a long, single hop. Douple-hop reception over 2,000 miles is possible, too.

F Layer

The F layer or region, also known as the Appleton layer, is 120 km to 400 km above the surface of the Earth. It is the top most layer of the ionosphere. Here extreme ultraviolet (UV) (10-100 nm) solar radiation ionizes atomic oxygen (O). **The F region is the most important part of the ionosphere in terms of HF communications.** The F layer combines into one layer at night, and in the presence of sunlight (during daytime), it divides into two layers, the F_1 and F_2. The F layers are responsible for most skywave propagation of radio waves, and are thickest and most reflective of radio on the side of the Earth facing the sun.

WEATHER MODIFICATION PROJECTS

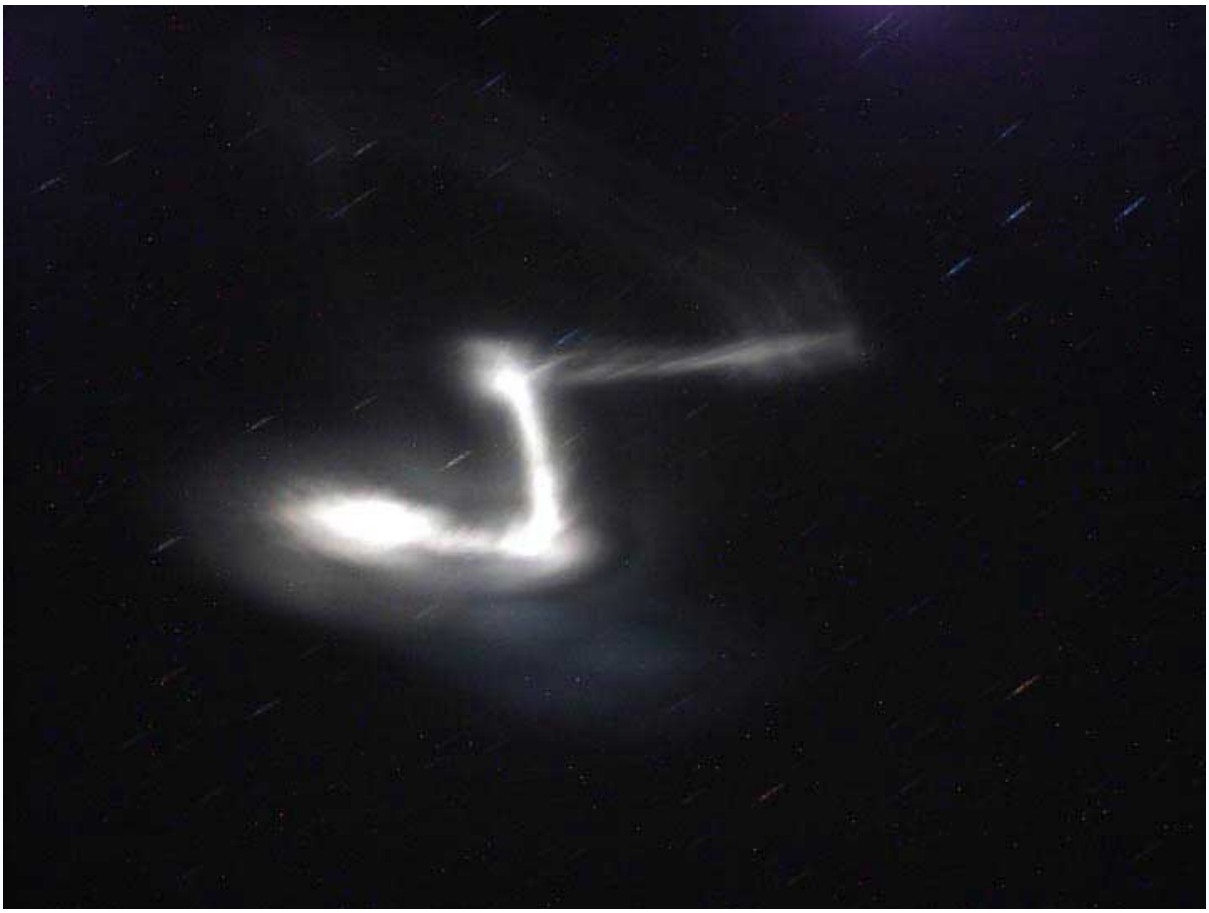
"In 1977, there were seventy-two (72) weather modification projects underway," according to a Special Impact Team report. "The **weather weapon** exists. It's already in use." NOAA admits to over fifty (50) today.

Black Contrails – just check almost any credible website

Brown Clouds - just check almost any credible website

Project Woodpecker – US and [former] Soviet project – check out any credible weather modification website

TMA Night Cloud tests (NASA) – Rockets released ***trimethylaluminum*** "forming clouds that could be seen for hundreds of miles," http://www.nasa.gov/centers/goddard/news/topstory/2003/0630nightcloud.html



TMA CLOUDS ARE SEEN FOR MILES

This photo was taken from Wallops Islands. NASA has used TMA for decades to study the near-space environment. This chemical burns slowly and produces visible light so that chemical tracers can be tracked visually with special camera equipment. [**They go on to claim that the ingredients, separately, don't cause harm, yet trimethylaluminum is highly toxic and extremely flammable**]. Credit; NASA/Wallops

US GWEN (Ground-Wave Emergency Network System) Towers – military VLF communication system, 150 to 170 kHz, 360 degrees for 250 to 300 miles, sites are 200 to 300 miles apart, coast-to-coast; after 1993 all Americans are exposed to these RF transmissions

Dyn-O-Mat and Dyn-O-Gel - A powder touted as a potential way to weaken hurricanes sucked the moisture out of a Florida thunderstorm in July 2001. An airplane dropped **8,000 pounds of the Dyn-O-Gel granules** into a cloud 10 miles offshore (**absorbing 4,000 tons of water**). "**Within minutes, the storm disappeared from Doppler radar."**

One granule absorbs 2,000 times its weight in water, falls to the ocean and then virtually melts away in the salt water. Then ask yourself, why is it so hard to believe that heavy spraying has been occurring, maybe not using dyn-o-gel mind you, but other types of chemicals. There are those that speculate that these "hurricane experiments" in the Southeast may be having a significant effect on the intractable drought there. There's even talk of using our favorite [CIA] 747 Supertanker for this. See Source Watch: http://www.sourcewatch.org/index.php?title=Dyn-O-Mat%2C_Inc.

In 1992, a small Russian company, **Elate Intelligent Technologies, Inc**., using the "electrostatics" of an antennae array consisting of "dozens of aerials", each 25 feet tall, that discharged electrical energy upward to

react with the ions of the air, "**cleared a 200-mile radius during a drizzly day**. The company claims it **can fine-tune weather patterns over a 200-mile range**; 'Weather Made-to-Order,' and to pioneering the field of '**weather extortion**.'" The company's commercial director asks the author, '***Do you remember that strong wind in Moscow two days ago? We created that***.'" This is small-scale weather modification utilizing HAARP-like technology. This is significant.

MILITARY and GOVERNMENT and WEATHER MODIFICATION

In 1997, according to Air Force, then-Major Barry Coble, the military historically adapts to the weather. A true statement, just as we do on fires. He then asks, "**What if military could forces could shape the weather …**" He states that this is "**the promise of weather modification and its role in support of the military.**"

He states that the military used to engage in it but has "stopped conducting [weather modification]." He then looks at the "current weather modification science and what the future holds for the weather modification field over the next ten years." Since he made that assertion ten years ago in 1997 that means that **we are here-and-now in the weather modification future, so to speak**. He states that he will recommend ways in which the military can, "**potentially, *exploit* any benefits of weather modification**."

He accurately states that United Nations (UN) treaties prohibit using weather modification to maim or kill people via the 1978 UN Convention on the Prohibition of Military [or] any Other Hostile Use of Environmental Techniques or the ENMOD treaty. This is the sole international document dealing with weather modification and allegedly, specifically outlaws weather modification for military use.

The Department of Defense (DOD) wrote its own policy based on the UN doctrine. An "instruction" dated January 10, 1995 was issued; The Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3810.01, *Meteorological and Oceanographic Operations,* the terms ***widespread***, ***long lasting***, and ***severe*** as follows:

1. **Widespread**. Encompassing an area on the scale of several hundred square kilometers.
2. **Long lasting**. Lasting for a period of months, or approximately a season.
3. **Severe**. Involving serious or significant disruption or harm to human life, natural, and economic resources, or other assets.

I **contend** that the weather modification I've been experiencing and observing over the past ten years is, as a matter of fact, widespread, long lasting, and severe – as a result of chemtrail and especially HAARP-like activity and whatever else is going on in the world! I've witnessed:

Widespread – The 1993 "Blocking High" and Hurricane Mitch are very viable examples [yes, HAARP is that powerful], and the daily worldwide chemtrail action as evidenced by the literally hundreds of legitimate websites and/or the likes of YouTube.com and LiveLeak.com.

Long Lasting – The "Blocking High" of 1993 that sat over the Mid-west for months on end and flooded them out; and the chemtrail spraying that occurs daily, especially prior to storms.

Severe – just read any one of the many "GOES Hot Stuff" segments on the "killer tornadoes;" or the likes of Hurricane Mitch resulting in death and destruction; and lately the adverse health problems and conditions people, including you, are experiencing due to continual chemtrail spraying activity.

Major Coble distinguished between "deadly or hostile" weather modification;" he described it as **"benign weather modification" (BWM**). That's a fair distinction don't you think? Then he makes the Orwellian statement that "**any harm caused by BWM is strictly a secondary effect.**" Incredible! You know - kind of like collateral damage. In other words, if we can define weather modification as benign, and something adverse happens, then it's okay, because it's only secondary. And furthermore, if it wasn't intentional, but only "secondary," then it's alright then? The results are anything but.

CLOUDS

In 1977, scientists figured that we had a 1% increase in cloud cover. In 1999, Patrick Minnis, a NASA atmospheric scientist based at the Langley [CIA] Research Center, in Hampton, Virginia, stated that **cirrus cloud cover has increased an average of 5 percent over** three National Weather Service stations in **Northern California since 1975**. Moreover, he remarked that **cirrus clouds** also show an **increase of 5 percent throughout the whole nation as of 1971**. Doing the math based on a 1977 formula, that would mean that we should have COOLED by 7 degrees. What happened to the alleged "global warming?" Maybe he didn't read the same book.

Prophetically, man is busily helping to increase the world's cloud cover. … Clouds form on aerosols; man-made particles could help to make more clouds. There is documentation that supports Government efforts to thwart or reduce the alleged "global warming" by cloud-making. As you can see, it does "cool" the earth's surface during the day, however, the reverse is true at night. It actually **INCREASES the temperature during the night** and by extension is drier – and we refer to that as No or Low **Fuel Moisture Recovery**.

In 1977, the National Climate and Atmospheric Research group in Boulder, Colorado, had confirmed that **whenever jet aircraft trails form they cause high-level clouds over large areas**. **Clouds can serve to moderate whatever climate trend is under way**.

SKY VAPOR RIVERS

In 1993, researchers announced they had discovered a never-before-seen network of **water vapor rivers** carrying as much water as the Amazon, some thousands of miles long, in the atmosphere **within 6 miles of the earth's surface**. Richard Newell, a MIT climatologist began his atmospheric vapor research word-wide in 1985. He found that they were generally about 150 miles wide, just a mile deep, and the longest 4,800 miles long, with 350 million pounds of vapor flowing past a given spot each second. The rivers are transient but generally each hemisphere has about five at a time. The "vapor rivers" generally head for the poles but on the way they're often deflected to the east by the Earth's rotation and Jet Stream.

(U.S. Air Force photo by Senior Master Sgt. Ray Lloyd) Dark Roasted Blend

Do you think we're seeing Newell's "vapor rivers" here?

Check out these YouTube video clips on gravity cloud waves and see if they might be "vapor rivers." http://www.youtube.com/watch?v=Ags7hvAfpQg . How about this similar looking strange cloud. So many times, we hear "I have never seen anything like this." http://www.youtube.com/watch?v=8NLkLRZXU3g . What about this series of "strange clouds" in Japan - http://www.youtube.com/watch?v=S2dyM0cSD9U And what about this "weird cloud formation … cloud wave" near Santa Barbara, CA in Oct. 2006, http://www.youtube.com/watch?v=cC8OywG3kUk .

When Loren McIntyre, a South American traveler and explorer, asked a Mayoruna Indian where the source of the Amazon River was located, the Indian pointed skyward to the clouds. Today's advocates of weather modification also look to the clouds as a source of water to increase current water supplies.

Were there any connections between the Spring and early Summer 1999, of NATO's aviation war activities and the environmental (weather) disasters that followed? Michel Chossudovsky thinks they were related. According to him, the latest scientific evidence indicates that USA military researchers have developed a **technology that is capable of potentially triggering targeted** floods, **droughts**, hurricanes and earthquakes, by **diverting of vapor rivers in the Earth's atmosphere**; however, he adds that there is no evidence that this potential weapon of mass destruction has already been used.

It is alleged by many that U.S. and former Soviet scientists are "tracking" these atmospheric rivers under the auspices of "Project Woodpecker, a covert operation.

EASTLUND PATENTS WITH WEATHER ALTERING POTENTIAL

Patent 4,686,605 Method and Apparatus for Altering a Region of the Earth's Atmosphere, Ionosphere, and/or Magnetosphere, Bernard Eastlund, August 11, 1987

Do you think you should be concerned about a device that makes these claims?

Weather modification is possible by, for example, **altering upper atmosphere wind patterns or altering solar absorption patterns by constructing one or more plumes of atmospheric particles** which will act as a lens or focusing device.

A **moving plume** could also serve as a means for … **focusing vast amount[s] of sunlight on selected portions of the earth.**

In another embodiment of the invention, **electron cyclotron resonance heating** is carried out in the selected region or regions at sufficient power levels to allow a **plasma** present in the region to generate a mirror force which **forces the charged electrons of the altered plasma upward along the force line to an altitude which is higher than the original altitude.** In this case the relevant mirror points are at the base of the altered region or regions. **The charged electrons drag ions with them as well as other particles that may be present.**

Line 11 passes through region R which lies at an altitude above the earth's surface. A wide range of altitudes are useful given the power that can be employed by the practice of this invention. The **electron cyclotron resonance heating** effect can be made to act on electrons anywhere above the surface of the earth. These **electrons** may be already present in the atmosphere, ionosphere, and/or magnetosphere of the earth, or **can be artificially generated** by a variety of means such as x-ray beams, charged particle beams, lasers, the plasma sheath surrounding an object such as a missile or meteor, and the like.

As explained above**, plasma will be present along line 11 within region R and is represented by the helical line 12. Plasma 12 is comprised of charged particles (i.e., electrons and ions) which rotate about opposing helical paths along line 11.**

FIG. 3 is an idealized representation of movement of **plasma 12** upon excitation by **electron cyclotron resonance** within the earth's divergent force field**.**

Electrons (e) are accelerated to velocities required to generate the necessary mirror force to cause their upward movement. At the same time **neutral particles** (n) which are present along line 11 in region R are **ionized** and **become part of plasma 12**.

As electrons (e) move upward along line 11, **they drag ions (i) and neutrals (n) with them** but at an angle (symbol circle with line) of about 13 degrees to field line 11. **Also, any particulates that may be present in region R, will be swept upwardly with the plasma**.

As the charged particles of plasma 12 move upward, other particles such as neutrals within or below R, move in to replace the upwardly moving particles. These neutrals, under some conditions, can **drag with them** charged particles.

For example, **as a plasma moves upward, other particles at the same altitude as the plasma move horizontally into the region to replace the rising plasma and to form new plasma**. **The kinetic energy developed by said other particles as they move horizontally is, for example, on the same order of magnitude as the total zonal kinetic energy of stratospheric winds known to exist.**

This just described ***plume domination potential***.

Referring again to FIG. 2, **plasma 12 in region R is moved upward along field line 11. The plasma 12 will then form a plume (cross-hatched area in FIG. 2)** which will be relatively stable for prolonged periods of time.

Thus, this invention provides the **ability to put unprecedented amounts of power in the earth's atmosphere at strategic locations and to maintain the power injection level,** particularly if **random pulsing** is employed, in a manner **far more precise and better controlled than** heretofore accomplished, by the prior art, particularly by **the detonation of nuclear devices** of various yields at various altitudes.

photo credit: Karen Titchener, Cloud Appreciation Society) Dark Roasted Blend

Detonation of Nuclear Devices? (Check out "**CLOUD EXPLOSIONS**" on this link - ***Extreme & Beautiful Weather***, www.darkroastedblend.com, [this may be a bit difficult to find but well worth it, once at site, go to ***Extreme Weather*** link on left, then scroll down NINE links to ***Extreme & Beautiful Weather, Majestic Skies Created by Powerful Storms,*** then to "**cloud explosions**." BE PATIENT AS IT TAKES A LITTLE WHILE TO DOWNLOAD) I think you'll see that most of those clouds in that series resemble "the detonation of nuclear devices." This is HAARP.

This invention has a phenomenal variety of possible ramifications and potential future developments. As alluded to earlier, missile or aircraft destruction, deflection, or confusion could result, particularly when relativistic particles are employed.

Also, **large regions of the atmosphere could be lifted to an unexpectedly high altitude so that missiles encounter unexpected and unplanned drag forces** with resultant destruction or deflection of same. **Weather modification** is possible by, for example, **altering upper atmosphere wind patterns or altering solar absorption patterns by constructing one or more plumes of atmospheric particles** which will act as a lens or focusing device.

A **moving plume** could also serve as a means for … **focusing vast amount[s] of sunlight on selected portions of the earth.**

The earth's magnetic field could be … disrupted at appropriate altitudes to modify or eliminate the magnetic field in high Compton electron generation (e.g., from high altitude nuclear bursts) regions. **High intensity, well controlled electrical fields can be provided in selected locations for various purposes.** For example, the **plasma sheath** surrounding a missile or satellite **could be used as a trigger for activating such a high intensity field to destroy** the missile or satellite.

Still further, **plumes** in accordance with the present invention can be formed to **simulate and/or perform the same functions as performed by the detonation of a "heave" type nuclear device** without actually having to detonate such a device.

(photo credit: Cobalt Osanga) Dark Roasted Blend

Detonation of a "heave" type nuclear device? Just check out the first few **thunderstorm ("cloud explosions") photos** in ***Extreme & Beautiful Weather***, www.darkroastedblend.com, [this may be a bit difficult to find but well worth it], once at site, go to ***Extreme Weather*** link on left, then scroll down to ***Extreme & Beautiful Weather***, ***Majestic Skies Created by Powerful Storms***. I think you will agree that most of the clouds in that series resemble "the detonation of a 'heave' type nuclear device." This is HAARP.

Patent 4,712,155, **Method and Apparatus for Creating an Artificial Electron Cyclotron Heating Region of Plasma**, http://www.freepatentsonline.com/4712155.html

"A method of **creating an artificial electron cyclotron resonance heating region of plasma** at about 50 km above the earth's surface in which the collision rate of the electrons in said plasma is greater than the cyclotron frequency of said electrons,

The present invention provides a method and apparatus for **creating an artificial electron cyclotron heating region of plasma** that lies above the earth's surface at altitudes (e.g. below 50 kilometers) where the collision rate of the electrons in the plasma is originally greater than the cyclotron frequency of the electrons. **First, artificial magnetic lines of force are established from the earth's surface into the region in which the operation is to be carried out.**

The artificial magnetic field is designed so that the field strength B at the altitude of the region of **plasma to be altered is sufficient to increase the cyclotron frequency of the electrons in the plasma so that it will exceed the collision rate of the electrons.** When this occurs, the plasma is now in condition to be excited by electron cyclotron resonance heating to thereby increase the charged particle energy. … The radiation is deliberately transmitted … upwardly through the region of plasma to be altered. … [and] when applied to the plasma in at least one region, **excites electron cyclotron resonance within the plasma to heat and accelerate the charged particles in their respective helical paths around and along the field line.**

Sufficient energy may be employed to cause ionization of neutral particles … which then become a part of the plasma thereby increasing the charged particle density of the plasma.

As the plasma moves upward, other particles from the atmosphere at the same altitude as the selected region move horizontally into the region to replace the rising plasma and to form new plasma. The kinetic energy developed by said other particles as they move horizontally is on the same order of magnitude of as the total zonal kinetic energy of stratospheric winds known to exist at altitudes equal to the region being altered. Since there is evidence that these stratospheric winds may be linked to certain weather patterns on earth, the present method may be used to affect similar patterns. (This sets up for vertical development, i.e. plumes)**)**

Plasma 12 is naturally present along these field lines. This **plasma** consists of equal numbers of **positively and negatively charged particles** (i.e., electrons and ions) which are guided by the field line 11.

As the **gyrating particle** moves along a field line in a uniform field, **it will follow a helical path** about its guiding center, hence linear motion, and will remain on the field line. **Electrons and ions both follow helical paths around a field line but rotate in opposite directions**

As known in plasma physics, **the characteristics of a plasma can be altered** by adding energy to the charged particles or by ionizing or exciting additional particles to increase the density of the plasma. One way to do this is by **heating the plasma** which can be accomplished in different ways, e.g., ohmic, magnetic compression, shock waves, magnetic pumping, **electron cyclotron resonance**, and the like.

However, before electron cyclotron resonant heating can be excited in the plasma of region R, **the cyclotron frequency of the electrons therein has to be increased until it is greater than the collision rate of the electrons.**

Plasma in region R at an altitude of about 35 kilometers is to be altered.

Referring now to FIG. 3, a first embodiment of how **plasma 12a is altered** is illustrated where a selected region R_1 of plasma 12a is altered **by electron cyclotron resonance heating** to accelerate the electrons of plasma 12, which are **following helical paths along artificial field line 11b** ….

As **electron cyclotron resonance** is established in **plasma** 12a, energy is transferred from the electromagnetic radiation 20 into plasma 12a to **heat and accelerate the electrons** therein and, subsequently, ions and neutral particles. As this process continues, neutral particles which are present within R_1 are ionized and absorbed into plasma 12a and this **increases the electron and ion densities of plasma** 12a.

The electrons are accelerated to velocities required to generate the necessary mirror force to cause their upward movement. At the same time neutral particles which are present along line 11a in region R_1 are ionized and become part of plasma 12a**. As electrons move upward along line 11a, they drag ions and neutrals with them.** Also, **any particulates that may be present in region R_1, will be swept upwardly with the plasma.** As the charged particles of plasma 12a move upward, **other particles** such as neutrals within R_1, **move horizontally in to replace the upwardly moving particles**. **As plasma 12a is being moved upward with a very high kinetic energy in the vertical direction** (e.g. 10^7 ergs/cm ^{2}), the flow of the atmosphere particles to replace the rising plasma will have comparable kinetic energy in the horizontal direction. **The horizontal kinetic energy so generated will be of the same order of magnitude as the total zonal kinetic energy of naturally-occurring stratospheric wind at altitudes of 22 to 32 kilometer;**

Since there is evidence that **wind currents in the stratosphere** appear to be **linked to certain weather patterns** on earth, such **winds can be produced with the present invention at selected locations and altitudes which can be used in establishing such weather patterns.**

This invention can be employed in any region of the atmosphere or space where an artificial magnetic field or fields can be generated after which the **electron cyclotron resonance heating** is carried out ….

In this process, artificial particles can be added to the region which is excited by the **electron cyclotron resonance** in any manner …. In this method, sufficient electromagnetic radiation can be transmitted so that **altered plasma** in the region is trapped on the artificial field line or lines between mirror points and **oscillates back and forth** there between. **If the electron cyclotron resonance excited region is energized sufficiently to cause a rising plasma region, this rising region can pull with it a substantial portion of neutral particles which exist in or near the plasma region**

For a very good example of HAARP activity, and the "**slicing**" action that is so characteristic of HAARP, **watch for these in your smoke columns** as well. The pulsing will only last for a few minutes at a time, *Strange clouds in Lancaster County*, August 19, 2007, http://www.youtube.com/watch?v=S6lfVpStNno

HAARP and MEV ELECTRONS (Mega-Electron Volt)

http://hyperphysics.phy-astr.gsu.edu/hbase/electric/ev.html for a definition.

"If the HAARP system, or a system like it only larger, can accelerate copius amounts of MEV electrons along magnetic field lines in the atmosphere, then … a geosynchronous satellite could be destroyed within 20 minutes.

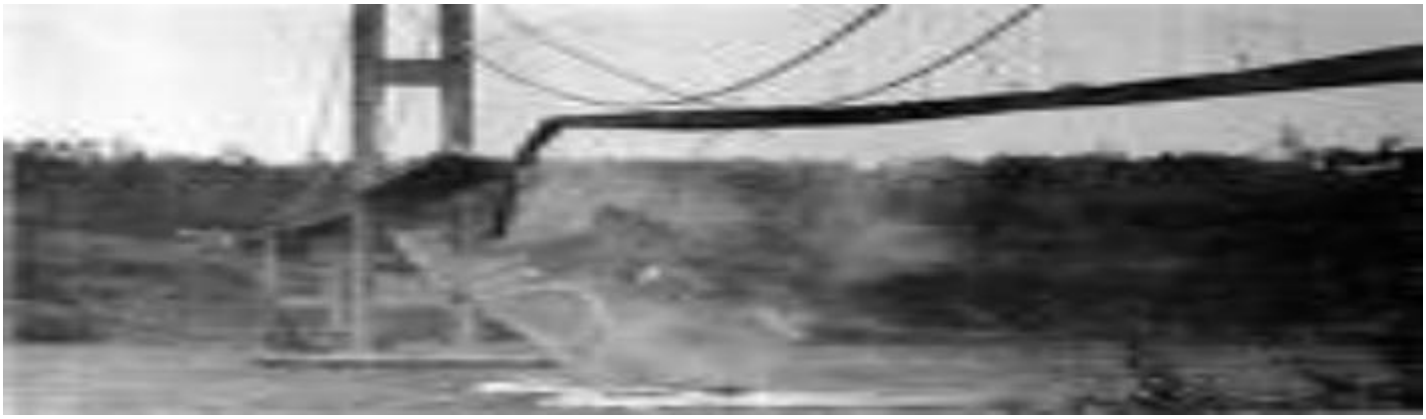
This produces extremely high laser pressure (called the ponderomotive force), which can drive a high-amplitude plasma "wake-field plasma wave." In physics, a **ponderomotive force** is a nonlinear force that a charged particle experiences in a rapidly oscillating, inhomogeneous electric or electromagnetic field.

RESONANCE HEATING OF ELECTRONS

"The core hypothesis underlying the ARCO patents was to **generate huge amounts of MEV electrons along magnetic field lines above the earth's surface** as shown in the MEV link. **Resonance energy can be applied many ways to objects.**

For those of you that know a bit about helicopters, it's the resonance effect that has destroyed several Llama helicopters when they sat on the ground too long. As the resonance builds up throughout the airframe, it contributes to the escalating and intensifying vibrations (resonance) throughout the aircraft, to the point where they violently shudder, bounce, and eventually overturn, and literally tumble off helispots.

WIND - the force that created a resonance effect and toppled the Tacoma narrows bridge in 1940. Once the wind gets the bridge moving, with steady or continued pulsing gusts, the bridge's swaying, increases to a point where it eventually shakes itself apart.



"A **resonant heating method of creating MEV electrons using Radio Frequency (RF) waves** was developed and exploited by the Oak Ridge National Laboratory (ORNL) Subsequent plasma devices have generated MEV electrons in the laboratory with resonant heating.

"The ARCO patents by Dr. Eastlund, hypothesized a **large phased array antenna** located in Alaska with its RF energy focused at altitudes 100km or more above the earth. <***Link here*** > MEV electrons . The frequency was chosen to be in the **1-3 MHz range to create an electron resonance heating that would create MEV electrons along the magnetic field lines.** The RF beam is shown in yellow in the figure. The **heating process is depicted as a helix along a magnetic field line**. **The electrons spiral along the field line with *increasingly large orbits* as their energy increases**.

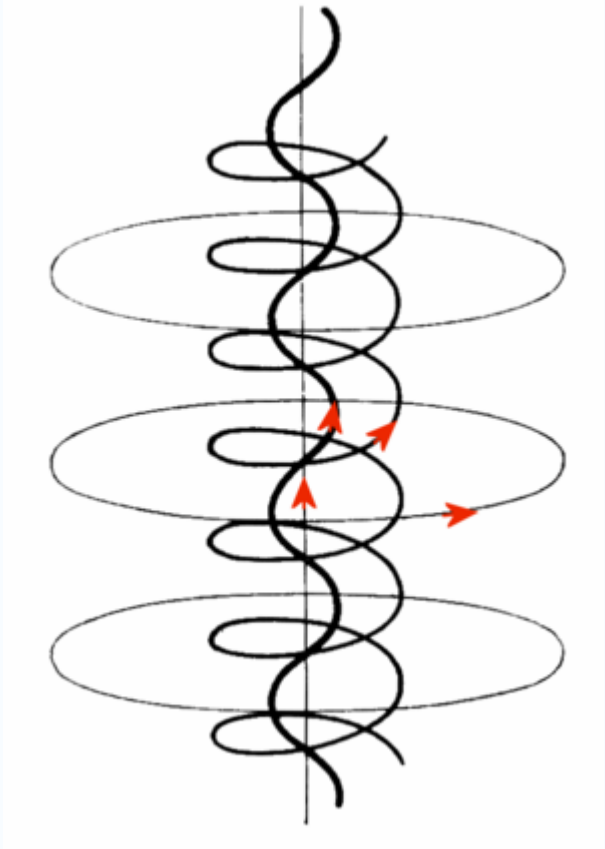
"The first DOD contract regarding the ARCO patents by Eastlund was from **DARPA (Defense Advanced Research Projects Agency)** and was entitled "The Alaska North Slope Electric Missile Shield", contract No. DAAHD1-86-C-0420, in order to determine the feasibility of generating the MEV electrons and to see if it would work. See "*Applications of In Situ Generated Relativistic Electrons in the Ionosphere*", by Dr. Eastlund, Dec. 13, 1990, ESEC Tech. Report 136, project summary. DARPA authorized report of the distribution in 1990.

HELIX COILS and ELECTRON CYCLOTRON RESONANCE

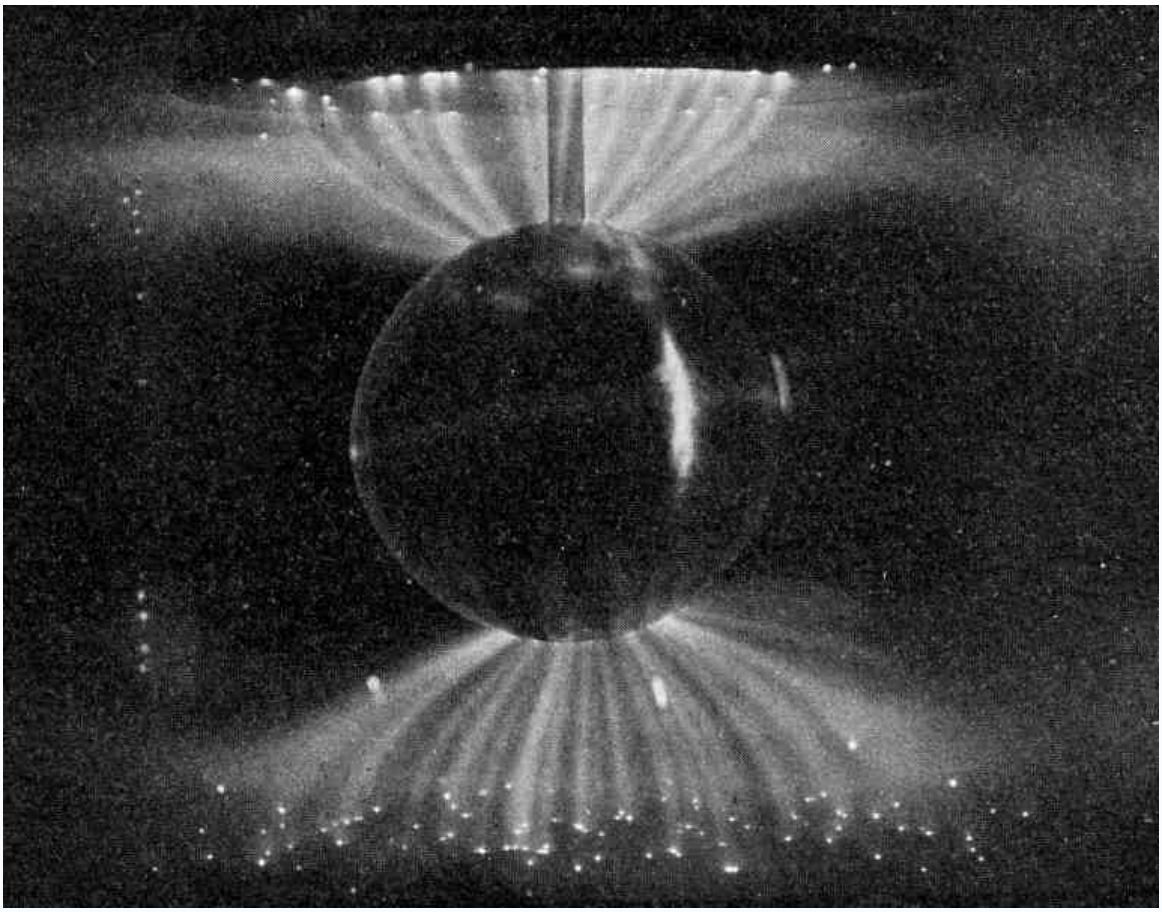
Electron Cyclotrone Resonance is a key component to HAARP technology. According to Nick Begich, "it can best be visualized as **a particle being spun like a coiled spring and then screwed right through something**." According to an Eatlund patent, more than one [electromagnetic radio] wave can be generated and the various waves can be **modulated at will and in a highly non-linear fashion**. Clarifying, non-linear deals with the "resonance effect," – initially large power inputs then lessening to small amounts of input. This is similar to pushing someone on a swing-set. Initially, you need considerable energy to get the swing going, but afterwards you need only small amounts of energy to maintain the swinging, merely using one finger to do so. That's why you'll notice the short-lived, pulsing HAARP "slices" and grid-lines in the clouds and/or smoke columns, analogous to slicing a pile of shaving cream with a fencing foil as it quickly fades away.

Moreover, Penn State's ionospheric research lab admits that they don't know what will happen when HAARP beams at full power. The Office of Naval Research, in a 1990 HAARP document admits that "at the highest HF powers available in the West, the **instabilities** commonly studied are **approaching maximum RF energy dissipative capability, beyond which plasma processes will 'runaway' until the next limiting factor is reached**. In other words, they don't know what it will do.

BIRKELAND CURRENT



The complex self-constricting magnetic field lines and current paths in a Birkeland current that may develop in a plasma[7] Sometimes called **auroral electrojets**, a **Birkeland current** generally refers to **any electric current in a space plasma**, but more specifically when charged particles in the current follow magnetic field lines (hence, Birkeland currents are also known as ***field-aligned currents***. They are **caused by the movement of a plasma perpendicular to a magnetic field**. **Birkeland currents** often show **filamentary, or twisted "rope-like" magnetic structure**.



Auroral-like Birkeland currents created by scientist Kristian Birkeland in his terrella, featuring a magnetised anode globe in an evacuated chamber.

Auroral Birkeland currents can carry about **1 million amperes**.[2] They can **heat up the upper atmosphere** which results in increased drag on low-altitude satellites.

Remember, **Electrons and ions both follow helical paths around a field line but rotate in opposite directions,** Patent 4,712,155.

Are you seeing the ***helical coils and vertical development patterns*** as discussed in Eastlund's patents?

Check out this YouTube video clip of a **helical coil**, not quite a tornado; **I'll bet you've never seen a cloud like this before**, *Strange Looking Cloud. Looks Like a Tornado*:
http://www.youtube.com/watch?v=uG4LzXhiQl8

Check these electron ***helical coil actions*** on each of the paper's links, Rowland, HL, Beam Physics Branch, Plasma Physics Division, Naval Research Laboratory, Washington, D.C., *Simulations of ELF radiation generated by heating the high-latitude D-region*; http://www.ppd.nrl.navy.mil/whatsnew/haarp,

Rowland, HL, Beam Physics Branch, Plasma Physics Division, Naval Research Laboratory, Washington, D., *Three Dimensional Simulations of [Lightning] Sprites and Elves*:
http://www.agu.org/webcast/rowland/web1wp.html ,

Both of Rowland's simulation papers provide **Excellent Animated Segments of HAARP Physics in Action – You See This Every Time You Witness a Supercell or Abnormally Large Fire Whirl.**

One of my all-time favorites is the Weatherwise magazine photo of "***a helix of circular contrails***" allegedly formed by a jet over Denmark on May 23, 1998. Not possible. This is clearly HAARP activity, just look at almost any of Eastlund's patent diagrams.

THE HAARP RFP

"The request for proposal by the Joint [Armed] Services was issued in February, 1990, and in the section entitled, "**Potential Applications**" it is stated that: Finally, the use of an **HF heater to accelerate electrons to Kev or MEV energy levels could be used** …. There already is indication that **high power transmitters** on space-craft **accelerate electrons in space to such high energy levels, and that those charged particles can impact on the space-craft with harmful effects.** "

PROJECT HAARP APPROPRIATIONS

The **1996** DOD Appropriations Bill, Report no.104-124, indicated $10 million for "counter-proliferation support, advanced development, HAARP", No. 159, to accompany Senate Bill 1087, Mr. Ted Stevens [AK] Senate, July 28, 1995.

According to the Citizens Against Government Waste website, in **2007** there was $3,200,000 for the HAARP (High Frequency Active Auroral Research Program), and since 1995, the project has received a total of $109.1 million.

"UNEXPLAINED" HIGH-ALTITUDE FLASHES and RARE "SUPER [LIGHTNING] BOLTS"

In 1994, scientists observed an "**unexplained** terrestrial phenomenon" - that being several "brief, intense flashes of gamma rays." They hypothesized that they were caused by electrical discharges in the ionosphere or stratosphere. They **emanated from below the horizon**, had extremely hard spectra (**peaking in the high-energy portion of the spectrum**), and were of **short duration**. In every case, there were well-defined storm complexes -extensive cloud shields similar to and characteristic of intense thunderstorms. They theorized if the sudden, strong charges were powerful enough, they would result in "runaway' electrons."

They also noted at least 18 **upward-shooting lightning events**, recorded by space shuttle cameras, some of them "**quite intense**," between April 1991 and October 1993. Remarkably, all of the episodes appeared to have been both **horizontal and vertical** and extending **in excess of 10 kilometers**. Fishman states, they also had to speculate that these events emanated from a "**rare** type of high-altitude electrical discharge **above the thunderstorm regions**."

During a similar series of **"rare" events**, scientist noted faint flickers of light high in the atmosphere over thunderstorms. These microsecond radio flashes, linked apparently to thunderstorms, are **10,000 times more intense** than the normal radio crackling we hear as a result of such storms. The Compton Gamma Ray Observatory picked up gamma-ray flashes originating in the atmosphere **suspiciously close** to some thunderstorms.

The scientists felt that even though thunderstorms seemed like a likely cause, "**the power of the gamma-ray bursts seem beyond the reach of an ordinary storm**." These flashes rise to **altitudes of 80 to 100 kilometers, just in the lower ionosphere, and span 10 or more kilometers**. It's noted that over some storms, they flicker every couple of minutes and strangely, over violent storms where one would think they should be, they may never appear.

The scientists were "**at a loss to explain** why the electrons accelerated by lightning would generate very powerful radio emissions, common during lightning storms. Moreover, **they cannot explain why the flashes are thousands of times shorter than a typical lightning discharge**, says one scientist, **nor can they explain why they come in closely spaced pairs**."

These scientists think that this phenomenon is reminiscent of **lightning bolts** reported by pilots, but never photographed, **on rare occasions**, when the lightning bolts **rise straight out of the top of a thunderstorm and on up into the ionosphere.**

"Such **'superbolts'** – **enormous, cloud-to-cloud bolts extend tens of kilometers or even 100 kilometers horizontally** – have been sighted **generally from the largest storms**, and some, known as **mesocyclone convective systems**, span a few hundred kilometers." One scientist felt that "ordinary lightning bolts" usually concentrate over the heart of the storms, whereas these **"superbolts" uncharacteristically occurred over the less active margins**.

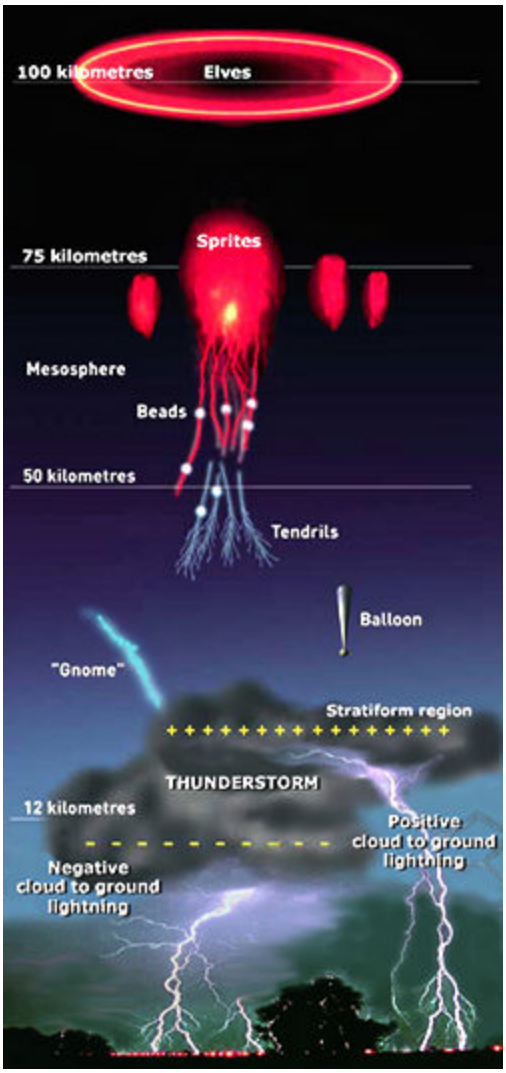
This all seems like HAARP-like pulsing to me.

There are huge colored emissions coming from the tops of thunderclouds. Once thought to be extremely rare, high-altitude cameras have shown us that sprites are often produced by thunderstorms. While the upper portions of sprites are red, they also have wispy blue tendrils that extend downward.

According to current models, **only the most powerful** lightning strikes generate enough energy to produce sprites. Martin Uman of the University of Florida **questioned** whether these models are accurate representations of the energy needed to generate sprites.

"**The models don't agree with the all the measurements**, so there's a big debate over which is wrong," said Uman. "Are the models wrong, or do we need to get better measurements?"
Left: A red sprite photographed by a team at the University of Alaska, Fairbanks.

Three bolts from the blue, Science@NASA, describing "sprites," June 8, 1999, http://science.nasa.gov/newhome/headlines/essd08jun99_1.htm



In August 2001 a high-altitude balloon was sent aloft to ride far above the great storms of the mid-west USA.

<< ***Gnomes, sprites and elves*** *stretch into space above powerful thunderstorms. Their fanciful names may reflect the fact that airline pilots reported them accordingly for many years*

STRANGE WEATHER and WEATHER ANOMOLIES

"Strange sky-glow anomolies and weird lightning and plasma-type effects have been seen all over the former USSR, near the Woodpecker transmitter sites. For example, the September 23, 1977, Washington Post reported that "a **strange**, star-like ball of light was sighted over Petrozavodsk in Soviet Karelia, spreading over it like a jellyfish and showering down shafts of light."

"Similar plasma effects have been created by the US ionosphere-heating ELF transmitters, at the height of 1993's great Midwest flood. The September 24, 1993, Kansas City Star reported that a University of Alaska's Geophysical Institute (involved in work on HAARP) research team discovered "**mysterious flashes of light that shoot from the tops of storm-clouds into the upper atmosphere ... over the Midwest during the summer floods**."

"These "**mysterious lightning flashes**" occurred in an area being hit with giant standing-wave, long-lasting weather-blocking systems that were generated by a combination of Project Woodpecker ELF waves and US GWEN Tower VLF waves."

Additional information about the **mystery flashes** over 1993's Midwest flood appeared in the May 27, 1994, Science Magazine which reported: "*Atmospheric Scientists Puzzle Over High-Altitude Flashes*" and certain recently released films taken from the space shuttle.

'Bizarre' Lightning Strike to be Studied, Art Thomason, The Arizona Republic, Aug. 11, 2005 12:00 AM

"A top National Weather Service expert in Phoenix will investigate a **powerful lightning strike that "sounded like dynamite exploding,"** damaging 13 homes in central Mesa on Tuesday afternoon. "**This is beyond the norm**," meteorologist David Runyan said. "**It's bizarre**. …"

"Mesa firefighters … said they **have never witnessed anything like the effects** of the Seventh Avenue strike. The force's intense heat exploded underground wires, including television cable, near the home, erupted through the soil and spewed dirt and debris like volcanic ash…

"Local scientists postulate that it was a positive strike, delivering much more voltage than the negative bolts." In light of all we've been learning, I think it was much more than that.

INTERESTING POINTS ABOUT LIGHTNING

James Dye, a researcher at the National Center for Atmospheric Research in Boulder, Colorado, says that lightning is **more frequent around the cores** as a storm grows stronger. It seems that **lightning channels** themselves are not in the most intense updrafts, Dye explained, but **in the weaker updrafts and downdrafts**. *Lightning position in storm may circle strongest updrafts*, Science@NASA, June 11, 1999: http://science.nasa.gov/newhome/headlines/essd11jun99_1.htm

***Fair weather* electricity** deals with the **electric field** and the **electrical current** in the **atmosphere**, and the **conductivity of the air**," says Dr. Lothar Ruhnke of Airborne Research Associates in Weston, Mass.

Atmospheric electricity is analogous to a **massive photographic flash**. An **electrical charge** is built up, a switch is closed, and **electrons barge across as a gas [PLASMA]**, ionizing it and producing light. But a **flash is a complete circuit**. In the case of the Earth, Ruhnke explained, **the atmosphere completes the circuit**.

"When you measure the ***fair weather*** electric field, **you're measuring the effects of ALL the thunderstorms on the Earth**," he said.

Ruhnke also notes that ***fair weather*** conditions also are **affected by the magnetosphere,** in the polar regions where the Earth's magnetic field leaves the upper atmosphere exposed to space. HAARP patents often reference the magnetosphere.

Soaking in atmospheric electricity, 'Fair Weather' measurements important to understanding thunderstorms, Science@NASA, June 15, 1999, http://science.nasa.gov/newhome/headlines/essd15jun99_1.htm .

LIGHTNING SAFETY

Do you want to experience a lightning strike? If you do, go golfing one Sunday in **July around 4 p.m**. and if you're really determined, be sure you do it in **Florida**.

Why Florida? Because Florida has twice as many lightning casualties (deaths and injuries combined) as any other state. Most of the strikes occur in the afternoon - two-thirds between noon and 4 p.m. local standard time with the casualty maximum at 4. Sunday has 24% more deaths than other days, followed by Wednesday. Lightning reports reach their peak in July. And to add to the formula, **when you hear thunder, you are already within the range where the next ground flash may occur**."

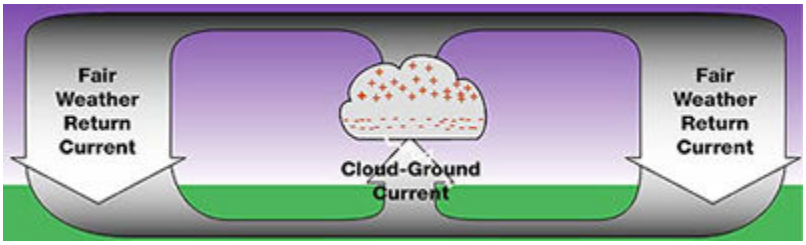
Human voltage, What happens when humans and lightning converge, Science@NASA, June 18, 1999, http://science.nasa.gov/newhome/headlines/essd18jun99_1.htm

Struck by Lightning.org: A Massachusetts, non-profit corporation, very informative site, http://www.struckbylightning.org/news/displncidentdb.cfm?StartRow=201

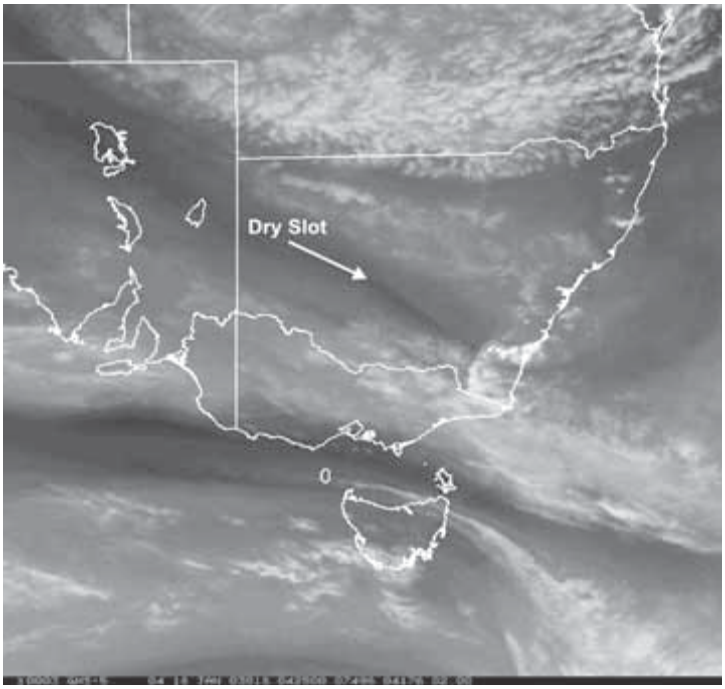
GAS WELL FLAME

During a 1995, gas well blow-out fire at Pasarlapudi, Andhra Pradesh, India, the flames reached 1200 degrees and the initial flames reached 100 yards above ground and were 10 yards in diameter. Both **positive and negative ions** were present in the flame. In a **fair weather field**, the **negative ions are drawn from the flame**. In convective turbulent daytime conditions, the negative ions move **with the wind and are dispersed up and away from the flames** to higher altitudes, diluting the amount of negative ions. **In the nighttime, negative ions accumulate below an inversion and reduce the fair weather field**. In a large area around the gas well flame, the **fair-weather field** may be almost **neutralized** by the field produced by the negative space charge being released by the flame. When a conductive object is raised above the Earth's surface, the electric field is concentrated around it. So the **electric field incident on the grounded flame will be much stronger than the ambient electric field**, emitting electrical charges into the atmosphere each second.

Fires burning under the **fair weather electric field** in **the open air (grass and open brushfields**) produce a negative space charge and can **modify the atmospheric electric field downwind of a flame**. The polarity of the space charge being released into the atmosphere is independent of the nature of source which produces the flame whether burning dried weeds, small trees, bamboo, aspen excelsior, or a propane torch.



DR. GRAHAM MILLS – Does the '<u>AUSTRALIAN DRY SLOT</u>' only occur Down Under?



The dark band of a dry slot slot across New South Wales, captured on water vapor imagery from the GM-5 weather satellite on 18 January 2003, the day of the Canberra bushfires. (Picture: Japan Meteorological Agency and Bureau of Meteorology)

Australian Bureau of Meteorology, Annual Report 2006-07:
http://www.bom.gov.au/inside/eiab/reports/ar06-07/PDF/AnnualReport-20

Fire weather research, by men and women like Dr. Graham Mills, has led to the discovery of the "**dry slot**" phenomenon. Femke Mason states "after several years of studying weather and fire patterns, Bureau of Meteorology Research Centre and Bushfire Cooperative Research Centre (CRC) scientist, **Dr. Graham Mills**, has revealed that fire behavior may be affected by what he refers to as '**dry slots'**.

"When this air reaches the surface, a rapid loss of humidity occurs and causes extreme drying of fuel on the ground, often increasing fire activity. Dr Mills said these processes have been observed for Canberra and one or two other major fires, so it would seem to be worth making a careful study of this phenomenon."

"Dr Mills said that while these dry slots occurred in the upper levels virtually on a daily basis throughout the country, and could be monitored using specialized **satellite "water vapor" imagery**. Preliminary results revealed that this is **more likely to occur in the afternoon, especially on hot days**.

"In addition, it would appear that **mountains and wind changes could also enhance the likelihood of dry slots affecting fire behavior** …

"A bushfire Cooperative Research Center (CRC) article written in conjunction with Dr. Graham Mills identifies a dry slot as: **"columns of dry, fast moving, high-altitude air that can cause a rapid loss of humidity and very strong gusty winds if they reach the ground**. Mills says that a dry slot is likely to act as a further **trigger** during a bushfire by drying **out fuel more quickly and increasing gustiness**.

Case study: A dry slot in action
"In observations undertaken through his research, Dr Mills believes the bushfires in Canberra on January 18, 2003 are likely to have worsened due to the presence of a **dry slot**. As explained in the CRC article: "On that day a **cold front** was pushing across south-eastern Australia toward the hot air masses and gusty winds already fanning the going fires.

"**Columns of hot air were rising up to 6km to mix with the drier air aloft**. The strong vertical mixing brought the **much drier and fast-moving air rapidly to the surface**, resulting in a very deadly and destructive fire. He admits he's not a fireman, but correctly states," The **drop in humidity** on the firelines means fuels dry out quickly … and can contribute to small fires turning explosive quickly."

"Wind changes due to changes in fire behavior can occur with an abrupt change in wind direction and variations in the low-level humidity and its corresponding effect drying fine-fuel moisture content.

Bands of extremely low humidity over the highlands of southeastern Australia were often preceded by similar marked reductions in near-surface humidity. "An interesting feature of several of these events is the **presence of a long, narrow, dark (dry) band in the water vapor satellite imagery …**

"Dr. Graham's research of ten dry slot events shows a very similar structure. Frontogenesis (http://www.tpub.com/weather2/4-24.htm) commencing near the top of the coastal escarpment and inland penetration of the cool change commencing when a deep mixed layer has formed over the plateau on the warm side of the developing front and the frontal temperature gradient increases to near its maximum daily value. It is shown that while these 'easterly cool changes' have gravity-current like characteristics, their origin appears to be on the escarpment, not the coastline.

"It is hypothesized that the **narrow, dark (dry) bands** seen in the **water vapor** channel satellite imagery **mark the downward motion on the eastern, (downstream) side of this gravity wave**. It is also hypothesized that the **strong vertical motions** associated with the cross-frontal circulation **enhance the entrainment of dry mid-tropospheric air from just above the mixed layer, thus leading to the near-surface humidity reductions observed just before frontal passage.**

Gravity wave circulations

"It was shown above that the development of a **gravity wave** above the strongly ascending branch of the frontal circulation leads to the development of significant vertical motion in the westerly flow above the pre-frontal mixed layer. The **descent** associated with this flow-disruption is **strongest in the middle troposphere** ... It is most likely that the **linear dark feature [dry slot] … is a result of, and marks the descending part of, the frontally induced gravity wave.**

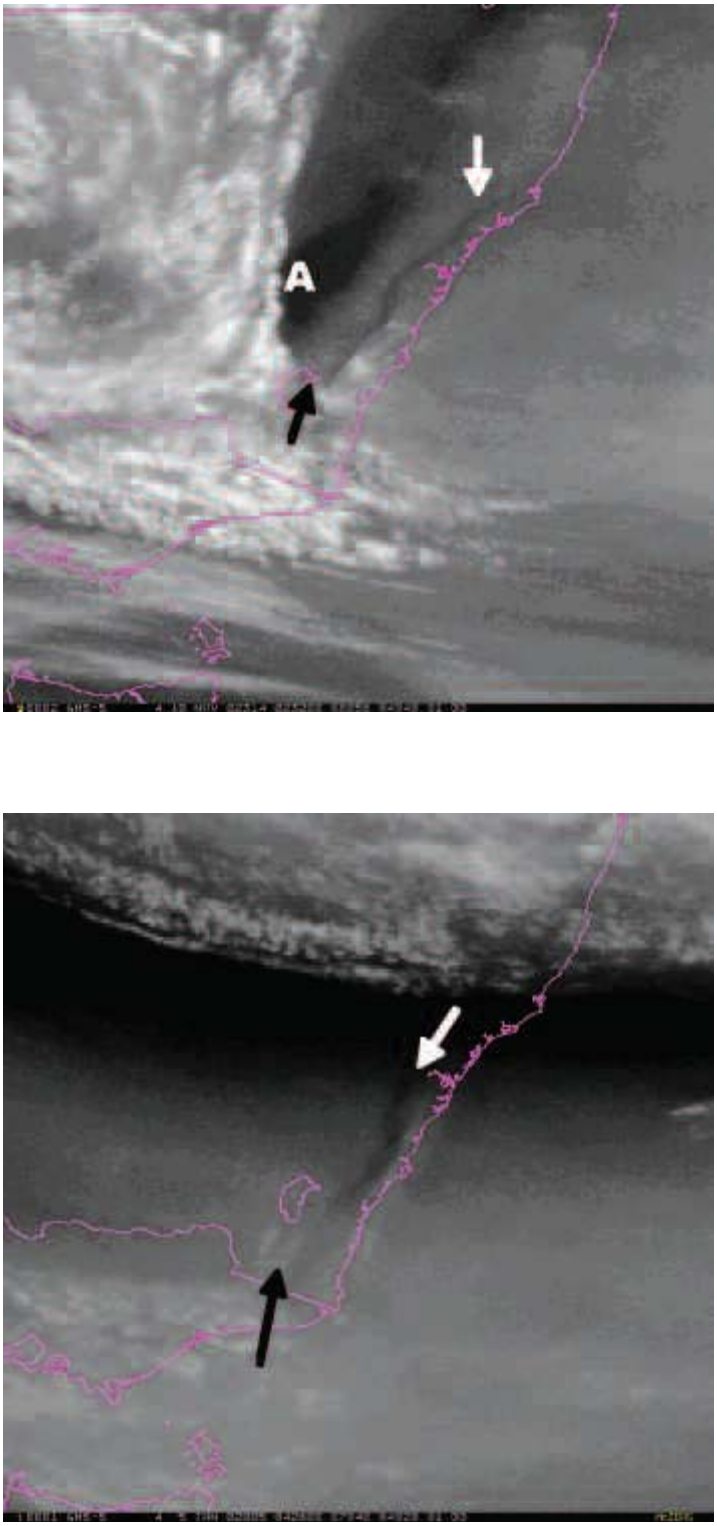
Other "dry slot" cases

"Dr. Mills studied eight cases, and they showed similar dry slot characteristics, such as: the time sequence of the **greatest ascent rate in the cross-frontal circulation**, the **greatest descent rate in the descending part of the mid-tropospheric gravity wave**, and the **greatest horizontal (pressure surface) temperature gradient in the lowest 100 hPa** similar to other like events. For both sections and for all eight cases, they are surprisingly similar, with **a rapid increase in maximum temperature gradient and ascent rate until early/mid afternoon, followed by a decrease in the magnitude of these same quantities, and a similar pattern for the maximum descent rate in the mid-troposphere.**

"Dr. Mills concluded that the (eastern) genesis region for the changes is **near the top of the topographic slope**, not the coastline… He believes that there **are significant and unusual humidity reductions prior to the arrival of an easterly change** – and so it might be better to use a better common terminology such as 'gravity current like' to describe these changes, removing the implication that they have a coastal origin.

"Dr. Mills states that this **gravity wave** is revealed as **a linear dark feature in Water Vapor (WV) imagery** on those occasions when the background water vapor in the mid-troposphere has suitable characteristics, and was seen on eight of the ten cases examined, although not always as clearly as other examples. The **presence of this particular linear dark feature in the WV imagery might well be an indicator of a strong vertical circulation associated with a developing easterly change. It has also been shown that these westward-propagating fronts do not commence their movement until their cross-frontal vertical circulations are well established, and so the presence of the linear dark line in the WV imagery may also be an indication that the change is about to start its westward movement.**

"A particular feature of the cool changes selected was **a dramatic reduction in the near-surface humidity shortly before frontal passage**. He hypothesized the most likely process causing the drying was an **enhanced entrainment of mid-tropospheric air into the mixed layer due to the very strong ascent associated with the thermally direct cross-frontal ageostrophic circulations, [the vector difference between the real or observed wind and the geotropic wind],** concludes Dr. Mills."



Enhanced (contrast-stretched) water vapor imagery from the GMS-5 geostationary satellite for 0230 UTC 10 November 2002 (top) and 0430 UTC 10 January 2002 (bottom). The arrows indicate the narrow dark band discussed in the text, while 'A' also refers to a feature described in the text.

Mills, Graham; *Lower atmospheric drying, stability, and increased wildfire activity*, http://ams.confex.com/ams/psfpapers/97603.pdf

Mills, Graham; Bureau of Meteorology Research Centre and the Bushfire Cooperative Research Centre, *On the sub-synoptic scale meteorology of two extreme fire weather days during the Eastern Australian fires of January 2003,* June 30, 2006 http://www.courts.act.gov.au/bushfireinquiry/Submissions/McRae/Submissions%20on%20behalf%20of%20Mr%20R%20McRae%20Addendum.doc

Mills, Graham; *On Easterly Changes over elevated terrain in Australia's southeast*, Aust. Met. Mag. 56 (2007), 177-190 http://www.bom.gov.au/amm/200703/mills.pdf

Johnston, Paul, Milne, John, Kelso, George, V International Conference on Forest Fire Research, 2006, *A Heat Transfer Simulation model for wildfire spread, dry slot decrease RH in AM,* http://people.csse.uwa.edu.au/paulj/Portugal_full_paper.pdf

O'Keefe, Brendon; *Dry Slots fan fire theory*, The Australian, 10 May 2006. http://www.theaustralian.news.com.au/story/0,25197,19080645-30417,00.html and a shorter version at http://www.bushfirecrc.com/publications/downloads/Update%202.pdf ,

Dr. Graham has accomplished a remarkable service in discovering this "dry slot" phenomenon, so use it. Spend time researching this phenomenon **likely** occurring in the United States as well, by regularly viewing the NOAA Water Vapor (WV) satellite images, and also remind IMET's and FBAN's to do the same on your fires.

Is this strictly an Australian phenomenon or is it also occurring in North America? I think it does occur in the US, based on satellite water vapor images.

WEATHER MODIFICATION

Mark Twain once said "Everybody talks about the weather, but nobody does anything about it." Well I'm here to tell you that there's plenty of people and Government entities that **are** doing something about the weather.

In 1976, Zbigniew Brzezinski, predicted in his book Between Two Ages, that there would be a new technology capable of making techniques for conducting secret warfare, among which he mentions techniques of **weather modification and instigation of prolonged periods of drought or storm**, available to the leaders of major nations.

In 1994, Cheryl Simon recognized that something was being done with the weather. "Each time one **of the world's 50 or so, very low frequency (VLF) transmitters** [Ionospheric Heating facilities] emits a signal, **streams of excited electrons rain down to the earth from the radiation belts in the outermost regions of the earth's atmosphere**, including the magnetosphere." Moreover, scientists from Lockheed and Stanford believe that even low frequency radio waves leak into the magnetosphere, causing the phenomenon. It's there that radio signals are amplified as much as 1,000 times, **thus altering free electron motion, even thousands of miles out into space**.

She say that this study will open up possibilities for "**controlled experiments in the ionosphere**" and thus will the Office of Naval Research is interested in this for its "basic science" and of course its **military implications**.

The **Blocking High of 1993**, a result of HAARP-like activity as the normal eastward flow of recurring storms was blocked for months. Some of you may remember this. This persistent block resulted in "***widespread***, ***long lasting***, and ***severe"*** destruction.

One criterion for a blocking high is the **double or split jet stream**, an **odd occurrence**. Lee Grenci, a Weatherwise author and commentator, describes a split jet stream as analogous to a very large rock in a

shallow stream that causes rippling water to split and flow around the rock on both sides. He discounts the "Olympic feat of weather modification" and refers to the 1993 episode initially as a "common blocking pattern."

He claims that the "double-blocking pattern" of the North Atlantic and North Pacific systems was "not so unusual after all." He does admit that the **blocks** were "**rather persistent.**" He readily admits that this was a "**very-long-lived blocking pattern**" and that it was "**unusual by any standard**." At least he admits that this was an unusually intractable storm. Normally, storms would flow through, slow and stall *occasionally* for short periods, but move on through until the next normal storm occurrence. In my view, this "event" had all the earmarks of HAARP-induced weather modification.

COMMUNIST CHINA WEATHER MODIFICATION – WORKING FOR A *CLEAR* 2008 OLYMPICS

According to Aviar Pallavi of the Asia Times, Communist China has the largest weather modification bureaucracy in the world; the Weather Modification Department under the [Communist] Chinese Academy of Meteorological Sciences has an annual budget of $60 million and $90 million and employs more than 32,000 people, and uses 7,100 anti-aircraft guns, 4,991 special rocket launchers, and 30+ aircraft nationwide across its 30 provinces and provincial municipalities.

What is their goal for the 2008 Olympics? It's **ensuring clear, blue skies**. To achieve this feat, the Weather Modification Office is busy researching the **effects of various chemical activators** on different sizes of clouds and various cloud formations at different altitudes. The goal is to drain the clouds of rain prior to their arrival this summer.

Bill Woodley, a weather modification researcher who's spent many years managing cloud seeding projects for NOAA, says "There's much we don't know [about weather modification] compared to [Communist] China …. **They've just gone crazy there. It's the epicenter of all weather modification activity**. They're pushing hard." Basically, the government has **guaranteed clear skies** for the Olympics' opening day, August 8, 2008. The first weeks in February 2008, manifested itself in major flooding occurring throughout Communist China. So, obviously they're weather manipulation is working.

MOGOLLON RIM- specifically mentioned regarding Weather Modification

In 1992, University of Arizona author Joe Gelt in *Weather Modification: A Water Resource Strategy to be Researched, Tested Before Tried,* recognizes that Arizona in some ways is geographically well suited to benefit from weather modification strategies. He states that **"The Mogollon Rim area has been identified as offering the greatest potential for in-state weather modification efforts.** A central geological feature of the state, the **Mogollon Rim** provides Arizona with a **laboratory for weather modification experimentation** and research. Stretching from northwest to southeast, the rim forms a barrier that forces flowing air upward to cool, a situation **favorable to orographic cloud development**.

The Salt River Project (SRP) conducted early cloud seeding operations during the 1950s, relying on air masses to lift propane-burned silver iodide for seeding. SRP's strategy also involved contracting for **aerial seeding during the 1950s and 1960s**. Another DWR-BuRec cooperative venture involved two two-month intensive observation programs conducted over the Mogollon Rim in 1987. The model has predicted the flow of atmospheric waves over **Mingus Mountain** and the **Verde Valley**, upwind of the Mogollon Rim. **Winds striking Mingus Mountain are uplifted, with a severe downdraft occurring in the Verde Valley**.

After BuRec's role lessened, NOAA, through its Federal-State Cooperative Atmospheric Modification Program (AMP), became Arizona's chief federal partner in weather modification studies**. Arizona, which joined AMP in 1989, is one of five U.S. states participating in the program. The other current AMP states are North Dakota, Utah, Illinois, and Nevada.**

NOAA funding enables states to conduct specialized research programs for their particular climatic regimes, Preliminary work conducted by the BuRec found that at **times some of the clouds over the rim may be too warm for the conventional silver iodide seeding. Other types of agents may need to be tested**. **Plans**

are afoot for NOAA to expand its services to the state and region. A legislative proposal has been worked out to establish a **Southwest Hydro-Meteorological Program**. This regional program is to **coordinate** the activities of various agencies and bureaus involved in **atmospheric work.** The **Army Corps of Engineers** also contributes to the state weather modification program.

According to Mr. Gelt's, 1992 paper, it appears that the State of Arizona realizes the implications of Weather Modification, so hopefully Arizona will continue to follow a cautious and studied approach. It's obvious, almost daily, that this is not the case with other types of spraying, i.e. chemtrails, and of course, the more common HAARP pulsing that is occurring almost daily in the Mogollon Rim area.

STRANGE WEATHER and WEATHER ANOMOLIES

Once again, strange sky-glow anomolies and weird lightning and plasma-type effects have been seen all over the former USSR, near the Woodpecker transmitter sites. For example, the September 23, 1977, Washington Post reported that "a strange, star-like ball of light was sighted over Petrozavodsk in Soviet Karelia, spreading over it like a jellyfish and showering down shafts of light."

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Once more, "mysterious lightning flashes" occurred in an area being hit with giant standing-wave, long-lasting weather-blocking systems that were generated by a combination of Project Woodpecker ELF waves and US GWEN Tower VLF waves. Additional information about the mystery flashes over 1993's Midwest flood appeared in the May 27, 1994, Science Magazine which reported: "Atmospheric Scientists **Puzzle Over** High-Altitude Flashes" and certain recently released films taken from the space shuttle.

HAARP and GRAVITY CLOUDS

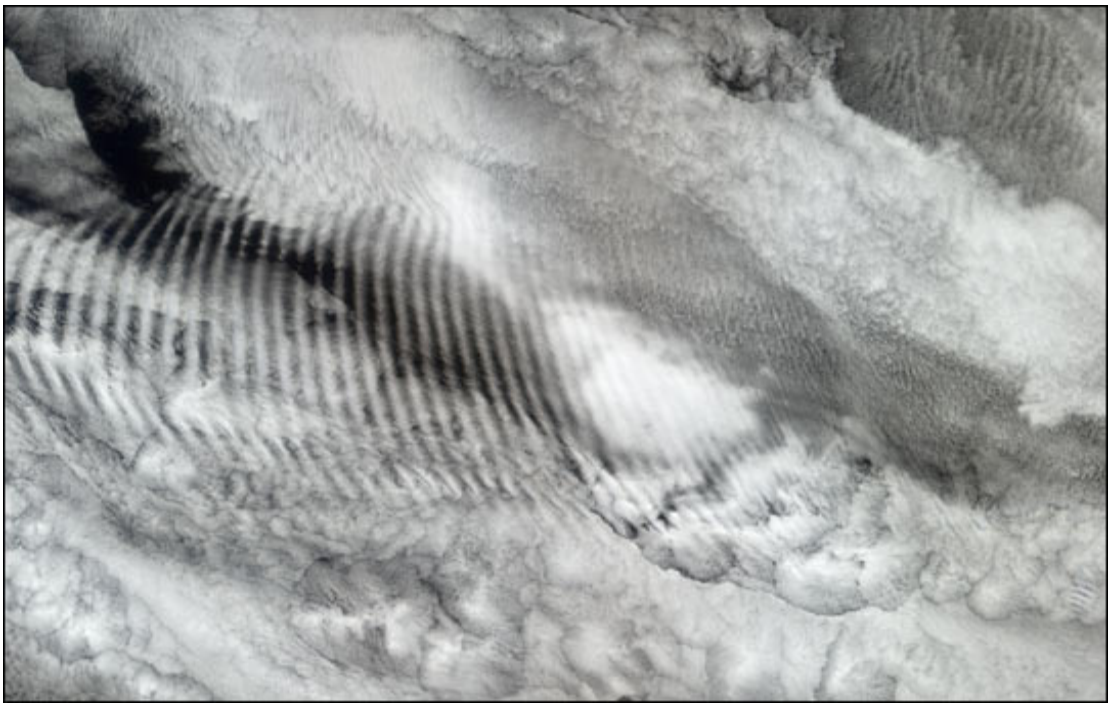
According to HAARP patent inventor Bernard Eastlund's website (Eastlund Science) http://www.eastlundscience.com/HAARP.html , **gravity waves are believed to be responsible for severe weather phenomenon**, but he admits that there is a lack of research and associated research papers. He admits that HAARP has the capability of producing 3.6 Megawatts CW (Continuous Wave). He believes that to be "significant" and cites Gossard (1962). Moreover, he cites research done by Sofko and Huang, *Gravity Wave Generation and Joule Heating associated with solar flares in the polar regions*. He says the gravity waves would have resulted from the auroral zone electrojet and the accompanying Joule heating activity. Check out the most common "gravity wave" YouTube.com video at http://www.youtube.comwatch?v=yXnkzeCU3bE .

"What is a gravity wave? To start a gravity wave, a **TRIGGER mechanism** must cause the air to be displaced in the vertical. Examples of trigger mechanisms that produce gravity waves are mountains and thunderstorm updrafts. To generate a gravity wave, the air must be forced to rise in STABLE air. Why? Because if air rises in unstable air it will continue to rise and will NOT create a wave pattern. If air is forced to rise up in stable air, the natural tendency will be for the air to sink back down over time (usually because the parcel forced to rise is colder than the environment). The momentum of the air imparted by the trigger mechanism will force the parcel to rise and the stability of the atmosphere will force the parcel of air to sink after it rises (you have now undergone the first steps into creating a wave)."

"It is important to understand the concept of momentum. A rising or sinking air parcel will "overshoot" its equilibrium point. In a gravity wave, the parcel of air will try to remain at a location in the atmosphere where there are no forces causing it to rise or sink. Once a force moves the parcel from its natural state of equilibrium, the parcel will try to regain its equilibrium. But in the process, it will overshoot and undershoot that natural position each time it is rising or sinking because of its own momentum. At a sufficient distance from

where the trigger mechanism caused the parcel to rise, the intensity of the gravity wave will decrease. At increasing distance, the parcel of air becomes closer to remaining at its natural state of equilibrium."

"In a gravity wave**, the upward moving region is the most favorable region for cloud development and the sinking region favorable for clear skies**. That is why you may see rows of clouds and clear areas between the rows of clouds. A **gravity wave is nothing more than a wave moving through a stable layer of the atmosphere**. Thunderstorm updrafts will produce gravity waves as they try to punch into the tropopause. The tropopause represents a region of very stable air. This stable air combined with the upward momentum of a thunderstorm updraft (trigger mechanism) will generate gravity waves within the clouds trying to push into the tropopause."



Gravity Waves Ripple Over Stratocumulus Clouds NASA Earth Observatory

These artificially generated "gravity waves", in my opinion, are actually HAARP-induced clouds, as they appear to be a might **too** perfectly symmetrical. Zoom in and you'll see what I'm talking about. You will notice "gravity waves" throughout the GOES Hot Stuff clips.

"Researchers have shown that gravity waves in the upper troposphere and lower stratosphere considerably influence the formation of high cirrus clouds considerably. Gravity waves are fluctuating air parcels caused by air parcel displacement, and then restored to its initial position by gravity. **The generation of gravity waves must occur in a stable atmosphere.** Gravity waves, to avoid rising or sinking, are continually seeking a state of equilibrium. It will, however, overshoot and undershoot that original position each time it is rising or sinking because of its own momentum.

"Gravity waves can reproduce both vertically and horizontally. They can result from a passage of wind across terrestrial forms and convection penetrating a stable region. **They can also be generated** as adjustments to imbalances in the atmospheric flow. They are observed at all levels in the atmosphere and seen in the troposphere as oriented bands of clouds. **Gravity waves transport momentum and energy from the troposphere to the middle atmosphere."**

PROPAGATION OF THE PRESSURE WAVES and GRAVITY WAVES

"During intervals of **high geomagnetic activity**, **trains of long period acoustic waves** have been detected at the ground. Investigating these phenomena, researchers found that these **traveling pressure waves** must be originated by auroral activities and that one of the most plausible generation mechanisms of these atmospheric pressure waves is periodic **heating of E-region in the polar upper atmosphere caused by imping auroral electrons.**

This sounds a lot like HAARP to me.

"The amplitude of a **pressure wave** associated with auroral activity observed at the ground was **akin to a blast wave** produced by volcanic, large meteorite and bomb explosions of great magnitude and the **corresponding atmospheric waves are seen in wave form. After a large explosion the longer wave arrives first and the shorter wave later.**

"The researchers found that **Auroral activity can produce both types of atmospheric waves**. They identified an important problem, i.e. the actual **mechanism** of wave-generation. They concluded that one of the most effective and plausible, mechanisms is **periodic heating of E-region by impinging auroral electrons**. This is HAARP.

"In the isothermal atmosphere, however, these **thermally excited atmospheric waves** attenuate rapidly outside the source region particularly at short periods. In the isothermal atmosphere the minimum energy flux required to produce **observable pressure waves** at the ground is therefore one or two order of magnitude higher than the one estimated for the isothermal atmosphere" from the *Propogation of Pressure Waves* by Kaicha Maida.

"**Convection and wind shear can produce gravity waves which transfer mean momentum flux between the layers of the atmosphere**. The **gravity waves** associated with the convection are **generated at the stable region of the atmosphere top above the convection region around the 10 km altitude**. A similar feature is seen above 15 km at the top of the updraft region. While a **negative shear** is seen at the **top of the downdraft region around 12 km**, a region of **positive shear is observed above 16 km, at the top of the updraft region**. Researchers Alexander and Pfister (1995) found that **gravity waves propagate away from deep convection**.

"But during a **day with strong convection**, the **zonal momentum flux magnitude** is associated with **longer periods**. …and the vertical flux associated with zonal wind is proportional to the asymmetry between the spectrum of east and west radial velocities. It is noticed that the asymmetry in the spectrum of east and west radial velocities is **maximum in the lower frequency region**.

So, **during the day with strong convection, the zonal momentum flux is prominent around the short frequency region**. The analysis of the dependence of wave periods on vertical momentum flux transport indicates that the zonal momentum flux is **maximum at those wave periods for which the magnitude of temporal asymmetry between the pair of beams is maximum**. So, the **transport momentum and energy to higher altitudes depends on the wave period, determined by the temporal mechanism of convection and shear,** according to Pabhakarant.

CHAFF EFFECTS ON WEATHER – Violent Winds, False Readings, and Potential Health Impacts

Radio frequency (RF) chaff is an electronic, defensive countermeasure designed to reflect radar waves and, thus, obscure aircraft (ships and other military equipment) from radar-tracking sources. The **chaff packets** are ejected from an aircraft in cartridges or projectiles that contain **millions of individual fibers**. Once released into the aircraft slipstream, the chaff packages burst open and a diffuse cloud of dipoles is formed to produce a radar-reflective cloud called a "**chaff corridor**."

Military-initiated "**chaff can spread over several hundreds of miles and stay in the air for up to a day and it could result in inaccurate [weather] warnings of severe weather**." It is generally held by the professional weather community that "**automated systems cannot distinguish chaff from rainfall**. The automated systems **record chaff as precipitation** and overstate the amount of rain archived in the database."

The U.S. Forest Service used cloud seeding and chaff during the 1960's and 1970's in attempts to suppress lightning and prevent forest fires. However, the project actually caused a massive increase in ice crystals and **actually reduced the amount of precipitation** by over-seeding the clouds. So, the reduced rainfall worked against the primary objective of reducing forest fires, and the experiments were abandoned in 1973.

Interestingly, in 1993, some non-military meteorologists theorized that a chaff cloud emanating from a nearby Air Force base resulted in some significant weather modification, even though it was inadvertent. From August 20/21 0000 to 0230,1993, meteorologists tracked a **chaff cloud coming from a flight-restricted, military base** (Luke AFB) southwest of Phoenix, Arizona during an active thunderstorm with lightning. The chaff, they theorized, **neutralized the lightning** as the radar cloud showed little or no lightning in the enveloped chaff cloud. However, **the chaff cloud intensified the thunderstorm winds enough to actually shear off one-foot-diameter power poles in its path at the ground level**.

Now that's pretty *remarkable* wouldn't you say? I would want to know and/or recognize that kind of weather modification, albeit inadvertent, in and around any wildfire I was working, wouldn't you? We work wildfires in and around military bases more and more now-a-days. Hopefully, an Incident Commander or Fireline Supervisor would have enough time to react and pull his folks to safety assuming he "recognized the current [and expected] weather conditions."

This one's **definitely worth looking into** because this "chaff cloud" moved through portions of Maricopa, Pinal and Gila Counties, where any one of us could be on an AZ State, BIA, BLM, or Tonto N.F. wildland fire. No doubt, you will be on wildfires near this or other military bases nationwide in the future when they're using this chaff. The military will never admit it though.

Article; AMS Online Journals, http://ams.allenpress.com/perlserv/?request=get-document&doi=10.1175%2F1520-0450%281997%29036%3C0302%3AICSWLO%3E2.0.CO%3B2 , ***BE PATIENT***.

REMEMBER, scientists admit that **widespread chaff can actually lead to inaccurate weather forecasts** because the chaff clouds typically produce a radar echo which closely resembles precipitation. We all know that **unpredicted wind is far more serious** than unpredicted rain.

According to Carole Pellatt's research, chaff contains; glass fiber (silica), aluminum, calcium oxide, magnesium oxide, sodium and potassium oxide, iron oxide, aluminum coating, silicon + iron, copper, manganese, zinc, vanadium, titanium and other." Moreover, chaff is a health hazard if inhaled, ingested or absorbed through the skin. What about when it settles on the vegetation and in the soils? This is potentially a very flammable mix here, especially in regularly-flown and applied flight routes.

Moreover, a 1998, DOD, EPA, GAO, and joint Canadian report found that "*today's chaff* is made of type E glass fibers coated with a 3-μm layer of high-purity (>99%), and chaff used for training purposes (e.g. RR-188 training chaff) consists of fibers 1.8-cm in length.

"**Aluminum** provides the fiber with its radar reflective properties. The chaff fibers are about the thickness of a human hair (ca. 25µm in diameter) and range in length from about 0.8 to 7.5 cm. The fibers are 60% silicate glass and **40% aluminum**, and contain trace amounts (< 1%) of silicon, iron, copper, manganese, magnesium, zinc, vanadium, and titanium. In addition, the fibers are coated with a lipid [either stearic acid or Neofat 18, a 90:10 (w/w) mixture of stearic and palmitic acids] which acts as a lubricant to prevent clumping during deployment.

Table 2. Estimated Elemental Deposition onto the PTA.

Compound	Content	Amount Release (kg)
Aluminum coating	40% (w:w)	4320
Silicate glass	60% (w:w)	6480
Al_2O_3	16% (w:w)	1036.8
SiO_2	56% (w:w)	3628.8
K_2O	2% (w:w)	129.6

Environmental Effects of RF Chaff

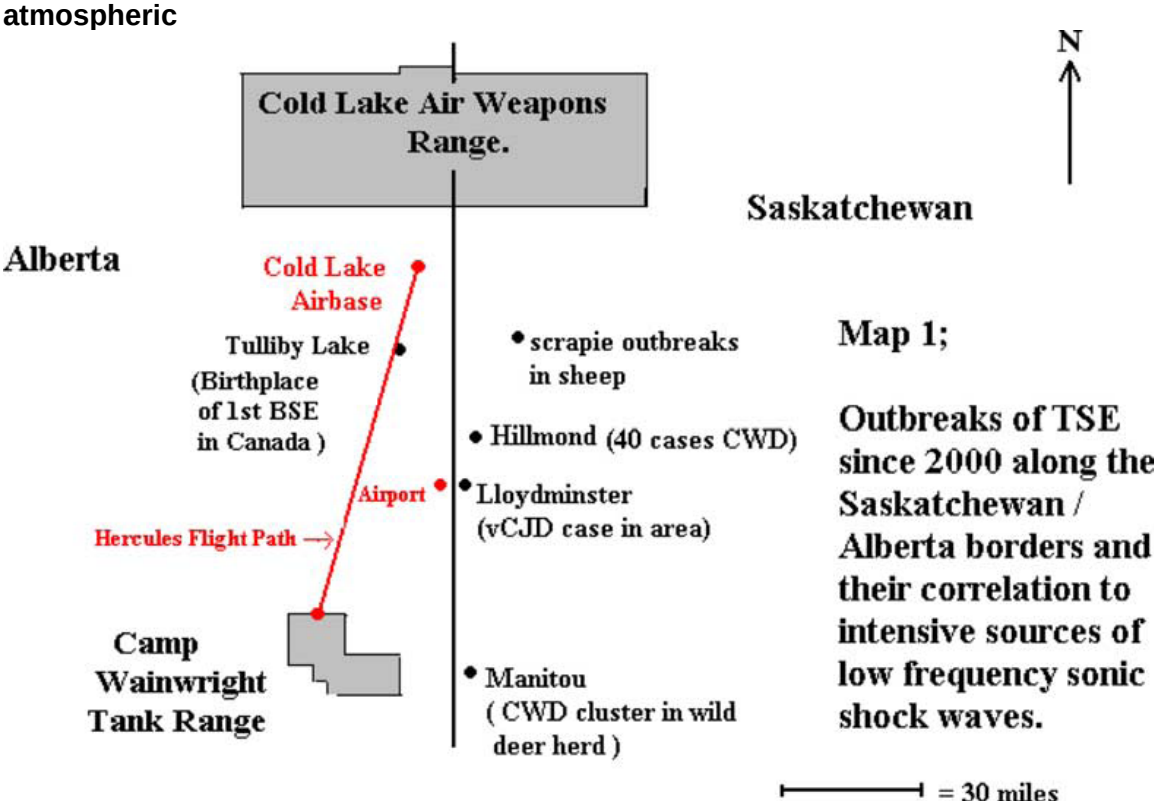
POTENTIAL HEAVY METAL HEALTH EFFECTS FROM WILDFIRE SMOKE and ASSOCIATED ENVIRONMENTAL IMPLICATIONS

Up to 25 million acres of land and water at several thousand sites in the U.S. are already contaminated with unexploded ordnance (UXO), toxic explosive compounds and their byproducts, toxic propellants, and heavy metals. More sites are being identified every year. See Military Toxins Project, *Communities in the Line of Fire, The Environmental, Cultural, and Human Health Impacts of Military Munitions and Firing Ranges*, Case Studies, June 2002, http://www.miltoxproj.org/CM%20Report%20No%20Photos.doc .

According to Mark Purdey, a leading expert on airborne heavy metals and how they relate to associated illness and poisoning, asserts that exceptionally high levels of **silver (Ag)**, **strontium (Sr)**, and **barium (Ba)** were measured in **deer antlers**, **vegetation**, and **soils** in **areas of chronic wasting disease (CWD) cluster areas in Colorado, Wisconsin, and Saskatchewan,** while other areas were 2 to 3 times less in CWD-free areas of Alberta and the UK. In fact, silver was virtually undetectable in antlers sampled from CWD-free deer herds in the UK and other locations.

Antlers from 2 to 3 years old ranging from free-ranging or farmed-raised deer were collected from April to June of 2003 across the regional farms where the most intense outbreaks of CWD were identified. Soil and vegetation samples were collected as well.

He notes that **Ag is potentially very toxic** and was **used extensively in silver-iodine crystal, cloud seeding weather modification projects** in drought-prone CWD areas, where significant spraying had taken place. Thus, the **resulting Ag-contaminated rain permeates the local vegetation, as well as in atmospheric "fall-out."**



He states that **Ag contamination will "bio-accumulate" in the lichens and mosses (bryophytes) and other vegetation**. It's interesting, he says, that the **"practice of cloud seeding is *mainly contained within the North American continent* – *the area which has virtually all cases of wild animal Transmissible Spongiform Encephalopathies (TSE*) – notwithstanding US authorities warning against the use of silver ions as a broad spectrum biocide.**

TSE, also known as **prion diseases**, are a group of progressive conditions that affect the brain and nervous system of humans and animals and are transmitted by prions. Mental and physical abilities deteriorate and myriad tiny holes appear in the cortex causing it to appear like a sponge (hence 'spongiform'). The disorders cause impairment of brain function, including memory changes, personality changes and problems with movement that worsen over time. Prion diseases of humans include classic Creutzfeldt-Jakob disease, new variant Creutzfeldt-Jakob disease (a human disorder related to mad cow disease), Gerstmann-Sträussler-Scheinker syndrome, fatal familial insomnia and kuru. The conditions form a spectrum of diseases with overlapping signs and symptoms; mad cow disease.

Prions cannot be transmitted through the air or through touching or most other forms of casual contact. They may be transmitted through contact with infected tissue, body fluids, or contaminated medical instruments. **Normal sterilization procedures such as boiling or irradiating materials fail to render prions non-infective**.

Purdey notes that the average **Ba and SR levels were significantly higher in the vegetation of CWD cluster areas at 54 ppm and 62,1 ppm, twice the levels of non-CWD, control-area environments.** In fact, the Ba and Sr levels in CWD clusters were also "several fold higher" than the average levels.

Therefore, it is noteworthy that **the majority of North American TSE clusters have emerged near to significant military munitions production/storage/testing facilities** such as White Sands [NM] missle range, a missle factory near Tucson, [AZ], the Rocky Flats Nuclear weapons factory, a plethora of 'cold war' and modern missle silos scattered between NE Colorado, SE Wyoming, SW Nebraska, the Cold Lake Air Weapons Range, and Camp Wainwright on the Alberta-Saskatchewan borders where radioactive metal-based materials were used.

Notes Purdey, irrespective of any role that elevated Ag, Ba, and SR levels may play a role in the pathogenesis of TSE's, the novel observation" of Ag in deer antlers might suggest that the antler acts as a heretofore unrecognized toxic 'sink' for storing excess Ag, Ba, and Sr intakes, as well as other metals in the deer family that are thriving off food-chains that have absorbed these metals.

Furthermore, he adds, "**many of these TSE affected animal and human populations were found living beneath low-fly jet flight pats or the 'take-off' flight paths coming from military or civilian airbases** like Namao, Alabama, and Leduc and Edmonton, Alberta, respectively." Sometimes, we work fires in those same areas. Bad smoke!

The military and geophysical researchers have used quite a bit of Ba in their aerosol spraying applications. **Aerosols containing the Ba ion – such as ferroelectric Ba stearate or Ba strontium titanate compounds – are regularly discharged along jet flight paths, low flight practice areas, around munitions production, storage, guided missle testing, and storage facilities as a means of enhancing refracting ducting radio and radar signaling communications** for maintaining reliable security and rapid around-the-earth communications. Ba ions have been widely discharged into the atmosphere since the mid 1970's as a means of conducting geophysical explorations of the ionosphere.

Therefore, any foodchain, including soil and vegetation, that is situated around these top military security areas, flight paths, or beneath these areas of ionospheric exploration, could find itself subject to the toxic 'fall out' from this mode of atmospheric metal pollution.

Notwithstanding the elevated levels of Ag, Ba, and Sr and how they affect the pathogenesis of TSE's, the "novel observation" of Ag in deer antlers might suggest that the antler acts a newly recognized 'sink' for storing excess heavy metal intakes in deer that are thriving of foodchains contaminated by these same heavy metals.

For example, **many of the TSE affected animals and human populations have been found to be living beneath low fly jet paths or the alternate 'take-off' flight paths coming from and/or leading into military and civilian airbases.**

So, by extension, all wildfires in these areas will be emitting high levels of Ag, Ba, and Sr in the smoke as the fuels consume. And so will any airborne soil, in the form of dust, you'll be inhaling on those dry, windy days. Be warned, be aware.

I remember the Narrows Fire, Angeles NF, 1997, and the very noxious smoke from that fire from heavy metals in the consuming fuel beds and how it made many firefighters very ill. I'm sure *some* of it was a result of air pollution, but what about the rest of it. It was ***THE*** worst smoke I've ever experienced.

See also Mark Purdey's, *The environmental origins of TSEs: the ferrimagneto-prion theory, (transmissible spongiform encephalopathy) (usage of ferrimagnetic substances for the treatment of mad cow fever)*, Townsend Letter for Doctors and Patients, 7/21/04**, http://www.encyclopedia.com/doc/1G1-119059792.html , (**White Sands Military Base).

This link, http://www.libertythink.com/fluchem.mp3 , is from a Texas radio station talking about local microbiologists finding **altered flu virus** showing up in lab samples, allegedly coming from chemtrails. This is pretty disturbing. There are a lot of people, including many of you reading this today, noticing more and more people getting sick that don't usually get sick. Others claim they're also spraying desiccated red blood cells.

HEAVY METALS and/or CHEMICALS FROM CHEMTRAILS and/or RELATED WEATHER MODIFICATION

Heavy Metals Defined - http://www.answers.com/topic/heavy-metals?cat=health

Aluminum - http://www.portaec.net/local/aluminum_smelter/health_effects_of_aluminum.html

Arsenic - http://www.epa.gov/ttn/atw/hlthef/arsenic.html

Barium – http://www.eco-usa.net/toxics/barium.shtml

Beryllium - http://www.epa.gov/ttnatw01/hlthef/berylliu.html

Boron - http://www.greenfacts.org/en/boron/l-2/boron-4.htm

Cadmium – http://www.epa.gov/ttn/atw/hlthef/cadmium.html

Calcium - http://dietary-supplements.info.nih.gov/factsheets/calcium.asp

Chromium - http://www.epa.gov/ttn/atw/hlthef/chromium.html

Chromium (Hexavalant) - http://www.osha.gov/OshDoc/data_General_Facts/hexavalent_chromium.pdf

Cobalt - http://www.epa.gov/ttn/atw/hlthef/cobalt.html

Iron - http://www.epa.gov/ORD/NRMRL/wswrd/cr/corr_res_iron.html

Magnesium - http://www.medic8.com/complementary/magnesium.htm

Manganese - http://www.des.state.nh.us/factsheets/ehp/ard-ehp-15.htm

Nickel - http://www.atsdr.cdc.gov/toxprofiles/tp15.html

Potassium - http://www.rr.ualberta.ca/Research/OWTRL/MSDS_Chemical/POTASSIUM%20ACETATE.pdf

Silicon - http://www.cdc.gov/niosh/02-129E.html

Silver - http://www.ranches.org/cloudSeedingHarmful.htm

Sodium – http://epa.gov/ogwdw/contaminants/unregulated/sodium.html

Strontium - http://www.lenntech.com/Periodic-chart-elements/Sr-en.htm (ignites **very** easily)

Thallium - http://www.atsdr.cdc.gov/toxprofiles/tp54.html

Trimethylaluminum - http://amdg.ece.gatech.edu/msds/mo/tma_akzo.pdf (Nasty stuff - **very** flammable)

Vanadium - http://www.osha.gov/SLTC/healthguidelines/vanadiumpentoxidedust/recognition.html

Zinc - http://dietary-supplements.info.nih.gov/factsheets/cc/zinc.html

THE ABOVE CHEMICALS & METALS HAVE BEEN DETECTED in VERY HIGH DOSES in RECURRING, CONCENTRATED CHEMTRAIL SPRAY AREAS. You're breathing this stuff! What effect does HAARP's electromagnetic pulsing have on airborne chemtrail metals?
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OTHER USEFUL INFORMATION on INGREDIENTS and SUCH

Drinking Water Standards - http://www.health.state.mn.us/divs/eh/water/com/fs/ioc.html

"Inactive" food ingredients (Food Dyes), i.e. Skittles - http://www.feingold.org/effects.html

Mono Sodium Glutamate (MSG) - http://curezone.com/foods/msg.asp

Wood Smoke Health Effects - http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1026893

Strange Days Strange Skies, http://imageevent.com/firestat/strangedaysstrangeskies , **EXCELLENT** website four (4) photos wide, short written clips, web links; chemtrails, **ailments and toxins** as a result of spraying, ***Please***, check this out. **VERY revealing**.

According to NASA, "the products of the **trimethylaluminum**, (TMA) chemical burn are aluminum oxide, carbon dioxide, and water. These chemicals pose no threat to the public during preparation on the ground or release in space. Consumers use aluminum oxides to relieve heartburn and to purify water." That may very well be so, *separately*, but when you combine them, you still get **trimethylaluminum, a highly toxic and extrememly flammable substance**. It's **pyrophoric**, *it lights when exposed to air*. They're using the Straw Man fallacy here. This stuff is **very** toxic and dangerous.

Telephone Interview with Rosalind Peterson, Agriculture Defense Coalition, January 19, 2008, www.californiaskywatch.com and www.newswithviews.com

- Trees are declining and dying all over the State of California. Attribute it to Persistent Jet Contrails, Atmospheric Heating & Testing Programs (NASA + U.S. Air Force & H.A.A.R.P. Programs), and Experimental Weather Modification Programs. The chemicals used in these programs and also lack of photosynthesis from ever-increasing man-made cloud cover.

- Trees will grow well for several years then develop deformed limbs and also begin bending over after a few years instead of continuing to grow straight. Trees are dying from the roots upward or the top down. Unusual trees symptoms are affect entire suites of tree and plant communities.

- Oak Tree decline is on the rise (little from Sudden Oak Death Syndrome), in many areas of California.

- Note that unusual molds, mildews, and fungus is increasingly found in many California counties.

- Oak Trees, Chemise, Monterey Pines, Yellow and Black Willow, Ornamentals, Yerba Santa, Douglas Fir, Elderberry, Redwoods, Manzanita, Redbud, Laurel, Plums, Roses, Toyon, Pines, Figs and more…are all showing signs of decline or have whole areas which are interspersed with dead trees.

- Those living in Redding and Shasta Counties (California) that rely on solar power are having to supplement power due to fewer sunny or clear days and the increase in man-made clouds produced by persisting jet contrails. (Dane Wigington)

- Believes wildland fires may be getting hotter because of significantly more metal content in soils (and on vegetation) based on sampling.

- Rains are not soaking into ground as well due to lighter dry-type rains. Thus, underground aquifers and roots systems are not receiving enough water to survive.

- Ground after rains normally would be very muddy for days but not so now, they are much drier sooner than normal.

- Documented case of large flock of birds dropping from the sky dead. Lake County, CA (Clearlake)

- Based on her agricultural background, she's concerned about the lack of requisite photosynthesis; fewer food crops producing based on increasing man-made clouds, lack of sunlight and odd rainfall patterns (experimental weather modification programs).

- Crop harvests are much less in CA and nationwide, and rather than exporting we (USA) are importing more fruits, vegetables, and other types of food rather than being self-sufficient as in the past.

- Heavy metals and other chemicals are being found in soil and water samples, and people are experiencing health effects from these chemicals.

- She suggested using the "contrail, persistent jet contrails, and persisting contrail" terms instead of "chemtrails" to achieve and maintain credibility due to Air Force and NOAA "hoax" declaration, especially if talking to Elected Officials

She recommended: **Our Dead and Dying Trees**; July 22, 2007:
http://newswithviews.com/Peterson/rosalind4.htm

LEGAL ISSUES RELATED TO WEATHER MODIFICATION

"**The Government is generally the sole defendant in all cases involving allegedly negligent weather forecasting.** The courts hold that enterprises like The Weather Channel make their forecasts based on weather information and meteorological data provided by the U.S. Government."

"The Brandt case involved some men on a fishing boat that relied on Weather Channel information during a storm, and one drowned. The judge ruled in favor of the Weather Channel by holding, incredibly: "Because prediction of weather is precisely that – a prediction, ***a weather forecaster should not be subject to liability for an erroneous forecast*** … To prove negligence requires proof of a minimum standard of care and proof that the defendant's conduct was below the minimal acceptable standard of care. … in favor of the forecaster's first amendment rights." *Brandt v. The Weather Channel*, 42 F. Supp.2d 1344 (S.D. Fla. 1999), *aff'd without opinion*, 204 F.3d 1123 (11thCir. 1999)."

Mr. Standler correctly states that "corporations and other professionals are generally legally responsible for their decisions, so why are weather forecasters held to a higher standard. He further argues: If the Government engages in providing some service, [weather forecasting based on its data] then it ought to perform that service competently and non-negligently. If one cannot rely on information, then that information is worthless, except as a suggestion to make an independent determination." [footnote omitted].

Mr. Standler then strongly concludes: "People on land need to be responsible for their own safety and they need to know of warnings about future hazardous weather. As weather forecasting becomes more accurate, the time will come when the Government should be held responsible for failing to warn about hazardous weather or other aspects of a negligent weather forecast. The time may have already arrived, and we need to merely wait for a courageous judge who will break with tradition and legal precedent and make new law."

As I said earlier – we're on our own as far as the weather goes – but we **must** still rely on the assistance of **CREDIBLE** and **COMPETENT** weather forecasters, meteorologists, Fire Behavior Analysts, and the like so that you can use the new indicators knowledge you will acquire.

Johns Mike, *Fire Law*, http://www.myfirecommunity.net/documents/Johns.pdf , Eighth International Wildland Fire Safety Summit, Missoula, MT, April 26-28, 2005.

Piel, Peter; Andover Legal Aviation Law Links, http://www.andoverlegal.com/PPAVI.htm , go to the weather links

Stadler, Ronald B., [Legal] *History and Problems in Weather Modification*, http://www.rbs2.com/w2.htm , 2002

Stadler, Ronald B., *[WX] Modification Law in the U.S.*, http://www.rbs2.com/weather.pdf October 22, 2006

Stadler, Ronald B., Tort Liability in the U.S. for Negligent Weather Forecasts, http://www.rbs2.com/forecast.pdf

TORNADOES

I focus on tornadoes quite a bit, especially in all the **GOES Hot Stuff, YouTube.com, and LiveLeak.com** tornado images. Obviously, **fire whirls and tornadoes** follow the same principles, and we've all been witnessing a lot more intense, tornado-like fire activity in the past few years - and it seems to be increasing.

There was the March 1998 *Gainesville, Georgia tornado* that went for 10 miles and killed 11, and meteorologists said it came "***without any warning amid powerful thunderstorms***." Elaine Sexton of the Georgia Emergency management Agency said "***There wasn't even anything on the radar… there wasn't anything anybody could have warned us about***."

Say what? In this day-and-age of sophisticated Doppler radar and its kin, how is it that tornadoes STILL sneak up on towns killing people? It's because of Weather Modification. I don't blame the meteorologists or the weather forecasters; it's not their fault really. I think they're doing the best they can during these weather-altered days.

"*Rolling Storm Clouds*", YouTube.com, this is definitely HAARP activity that ***preceded a tornado***, http://www.youtube.com/watch?v=eGBiuqghO1k.

"*Rolling Cloud*", YouTue.com, this definitely appears to be potentially ***dangerous wind currents aloft*** in this one, http://www.youtube.com/watch?v=jcExWUBMY5Y

"Storm Cloud", YouTube.com, this rolling, **greenish cloud** means tornadoes:
http://www.youtube.com/watch?v=mq2cVaWEMl0

"Tornado in Southern New Mexico", LiveLeak.com, May 4, 2007 tornado "outbreak"; Does that mean there was more than one? http://www.liveleak.com/view?i=4bb_1178484979

"*Huge Tornadic Supercell Chases Us – South Dakota 06-06-07",* YouTube.com, **amazing** fast and violently spinning vortices with HAARP activity throughout almost the entire 10-minute video by Minnesota Storm Chasers, as they drive speeds of 80-100 mph to stay ahead of it, http://www.youtube.com/watch?v=3NGntjnkDHA

"*Supercell Thunderstorms – Beauty of the Beast*", YouTube.com, amazing footage of mostly severe supercells with significant HAARP activity evidence throughout almost all of this 6-minute video – good stuff, http://www.youtube.com/watch?v=kBD8teVUM7w

"Storm Cloud wall, *incredible"*, LiveLeak.com, definitely some HAARP activity here
ttp://www.liveleak.com/view?i=7d7_1186902264

"Fort Cobb, OK Supercell Time-Lapse", YouTube.com, very interesting supercell with definite HAARP activity, http://www.youtube.com/watch?v=RLrJADfkd1I , Compare this to HL Rowland's – "*Simulations of ELF radiation generated by heating the high-latitude D-region*"; it's HAARP all the way, http://www.ppd.nrl.navy.mil/whatsnew/haarp , and HL Rowland's animated supercell, lightning simulations, *Three Dimensional Simulations of [Lightning] Sprites and Elves*, http://www.agu.org/webcast/rowland/web1wp.html .

This is a quickly-forming little tornado that "surprises" everyone; if you can speak Japanese, you can let us know what he's saying. Would something like this "surprise" you and your Crew? http://www.youtube.com/watch?v=0doQjGs0dco

"Devastating and violent tornadoes" (6 ½ minutes), LiveLeak.com, **amazing historical footages**, http://www.liveleak.com/view?i=163_1175041084

"*Hay Devils*", YouTube.com (National Geographics), this whirlwind shows what will happen to all the **slash** that you generated during line construction or structure protection and then feed and intensify any firewhirl that develops; similar to what happened on the Fish Fire, August 2001, near Reno, Nevada, when structure-protection slash, lifted into the firewhirl column causing intensified fire behavior and ultimately a huge firewhirl that burned **THROUGH a good, black Safety Zone**, http://www.youtube.com/watch?v=lheEu2prfzU

"*Twister*", YouTube.com, edited from the movie; I liked how he edited this and of course the music, http://www.youtube.com/watch?v=lLeOAQsqouU

Is there any truth to the legend that my town is protected from tornadoes?

No. **Violent tornadoes have crossed rivers of all shapes and sizes**. The deadliest tornado in US history crossed the Mississippi River undeterred on March 18, 1925. Tornadoes have crossed almost every major river east of the Rockies, as well as high elevations in the Appalachians and Sierra Nevada. In 1987, a violent (F4) tornado crossed the Continental Divide in Yellowstone Park. The **Salt Lake City** tornado of **August 11, 1999 crossed a canyon – descending one side and rising up the other about halfway along its path**. ***Meteorologists and weather forecasters declared this 1999 SLC tornado as very unusual because the SLC Basin geography was supposedly not at all conducive to tornado development.***

What is the highest-elevation tornado? Do they occur in the mountainous West?

On **July 7, 2004**, a hiker observed and photographed a tornado at **12,000 feet** in the **Sequoia National Park, CA**, and this is probably the highest elevation tornado. On **July 21, 1987**, there was a violent (F4 damage) tornado in **Wyoming between 8,500 and 10,000 feet**, the **highest altitude ever recorded** for a violent tornado. There was F3 damage from a tornado up to the **10,800 foot** elevation in **Utah's Uinta Mountains** on **August 11, 1993**. The 1999 Salt Lake City tornado produced F2 damage. On **August 31, 2000**, a **supercell** spawned a photogenic **tornado** in **Nevada**. Tornadoes are generally a lot less frequent west of the Rockies per unit area with a couple exceptions. One is the **Los Angeles Basin**, where "**weak-tornado" frequency over tens of square miles is on par with that of the Great Plains**. Elsewhere, there are probably more high-elevation Western tornadoes occurring than we have known about because many of the areas are sparsely populated, and they lack the spotters and storm chasers of the Plains.

Iowa Storm Spotters and Chasers, SKYWARN:
http://www.iowastorms.com/weather/html/modules.php?name=FAQ&myfaq=yes&id_cat=7&categories=#84

Rope Tornado

Tornadoes often assume a ropy, sinuous shape in their final minutes; but they can remain rope-like during their entire life cycles. Although these may *look* weaker, some get more intense as they narrow and tighten (the ice skater effect). ***With tornadoes, size does not necessarily indicate strength***! Indeed, **fire tornadoes** are becoming more common.

STRANGE CLOUDS

I don't quite know what this cloud is, other than I agree with the English photographer, it's a "*Mystery Cloud*, but I would find it very dangerous if this type of wind hits a wildfire, YouTube.com, http://www.youtube.com/watch?v=wMDOWMhmqNM

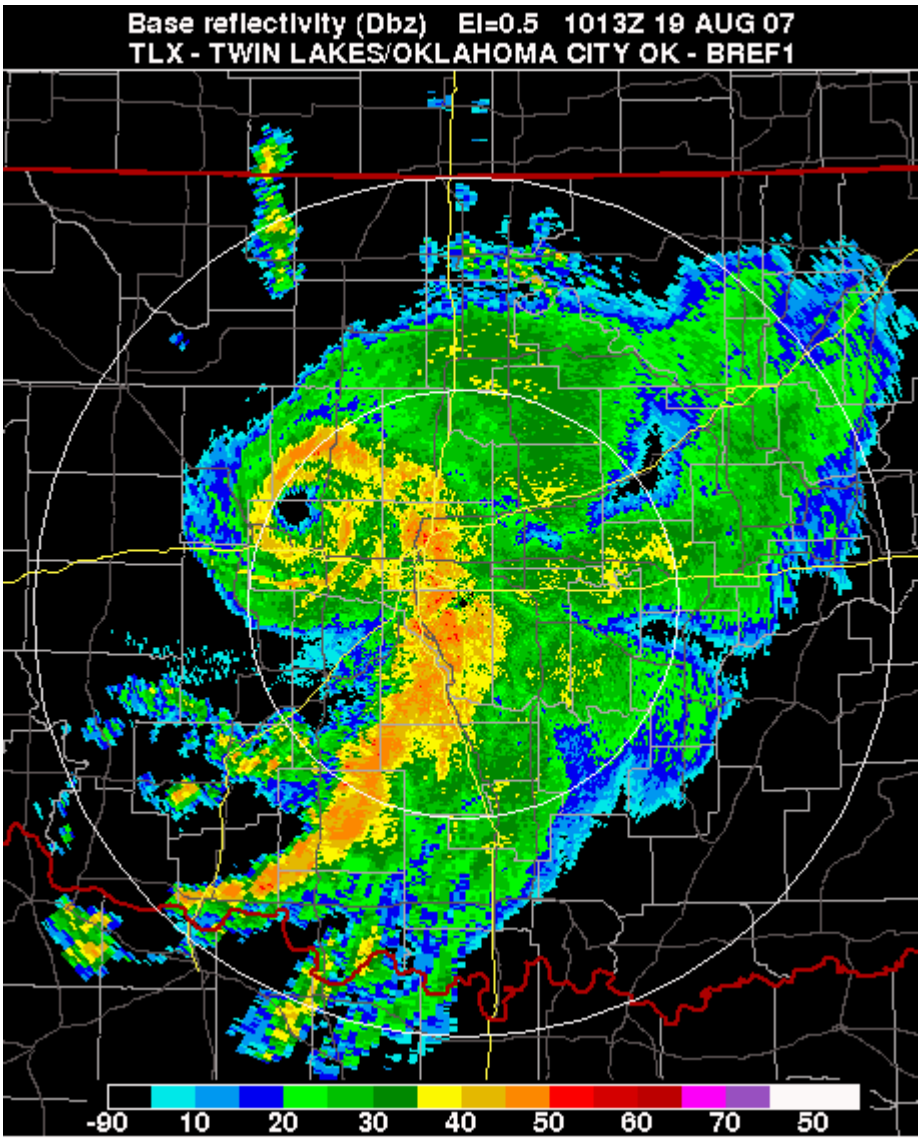
Nubes Exranas – Strange Clouds; 3-minute video, YouTube.com, you'll have to admit that **MOST** of them are **NOT NORMAL**, October 2007, http://www.youtube.com/watch?v=v0dRRVAzLoU

Chromecast, *Strange Cloud Phenomena,* YouTube.com, very long thin, cloud overhead, http://www.youtube.com/watch?v=5EVOf6GyNUw

VERY STRANGE WEATHER EVENTS

Oklahoma's Secret Tropical Storm; Weather or Not – Weather Archives http://www.stormeyes.org/tornado/blog/archives/weather/index.php
This is an incredible story of an ***inland tropical storm*** in Oklahoma where this prescient and dedicated weather forecaster is in awe at what is occurring, and he is literally beside himself throughout the night as he tries to understand what is happening, and is continually befuddled as this storm does its thing. Excellent links. Unbelievable!

Oklahoma's Secret Tropical Storm - August 19, 2007



"Good morning. **Oklahoma had a tropical storm overnight**.

"At least that's a legitimate claim that can be made, since [Hurricane] Erin still was being classified as a tropical depression last evening before strengthening to produce ***sustained tropical storm force winds.*** Isolated surface ***gusts*** even **exceeded hurricane force** low for now.

"What follows are excerpts from a series of messages I sent privately to others overnight. They give one atmospheric scientist's running, real-time perspective on **a bizarre event** ….

"It has been impressive to watch how well this system has held together a circulation **after moving inland** -- indeed, **looking better inland than it ever did over the Gulf** ….

"It reminds me of one of those Australian "landphoons," which are fairly rare even there, and **nearly unprecedented here**.

"As for what to call this … **Still a lot left to learn about this crazy atmosphere of ours...**

“As of 4 a.m. CDT, Erin still is being called a tropical depression by HPC, but has been **producing tropical storm force sustained winds right here in Oklahoma.** That discussion is incorrect, in that those are *sustained* TS force winds (as shown in this OK mesonet plot and others overnight) -- not just gusts, and not just in thunderstorms either. There also have been TS force, southeasterly inflow (not outflow) winds.

“They'll have to classify this burst of intensification as something over Oklahoma.

“How is this going to be handled in the NHC best tracks? How should it be handled?

“The "eye" from OKC's terminal Doppler weather radar (TDWR), saved as a still image from TDWR.

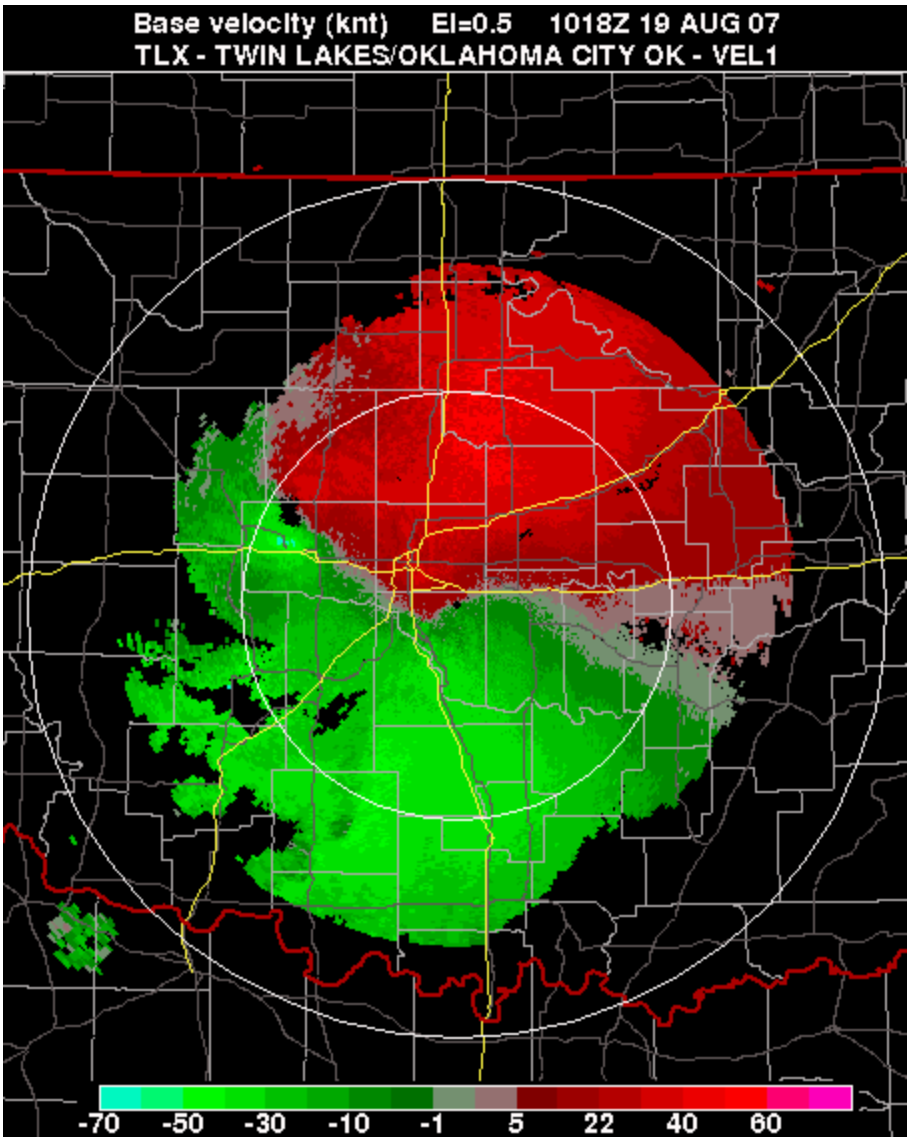
“The winds are in MPH. Still, thanks to a low-level jet that has mixed substantially down to the surface, we've had ***sustained, tropical storm strength gradient winds*** in the area from what still is a warm core low, and was a named tropical storm at one point. **Call it what you will**.

“There were a few tornado reports in the east semicircle of Erin yesterday in NW TX and W OK...nothing significant, just small/brief touchdowns...but **that was more than anyone believed would occur before the event began to unfold**. Check out the tornado and wind reports received so far. (**73 reports with at least 3 tornadoes**)

“Although it was east of the strongest low level wind fields, and nontornadic, a small supercell also moved just E of Norman and was photographed by Rich Thompson. Note the pronounced wall cloud in this picture.

”Now it's approaching 6 a.m. … The main spiral band is moving past me now. **Surface sustained winds still are legit TS strength farther NW near the eye. Yes, eye.** [See reflectivity image at top.]

“Check out the base Doppler velocity image at the next scan. **Classical**...



“Yes, you're reading it right: There are a few pixels of 60-70 kt inbound velocities just off the deck, on the south side of the eye. There were hurricane-force winds *above the surface*, over Calumet, Oklahoma. It's hard to believe I'm typing this.

“Those who are up will be able to follow this **amazing event** for the rest of the morning on the Twin Lakes (Oklahoma City) radar: OKC radar from COD ... and linked loops.

“Maybe it will spin down from here on...maybe not. **I've lost all confidence in my ability to predict this system** and have decided to just enjoy it!

“655 a.m.: Now, why am I calling this a "**secret storm**"? … **I realized how different media treatment would be with the *very same conditions* and radar imagery superimposed on South Florida and called a tropical storm.** … The Weather Channel … Matt Drudge … CNN … Panic and mayhem everywhere...live at 11!

“But here in Oklahoma, it's a scientific curiosity for the semantic dickering and curious investigation of weather scientists and enthusiasts -- but for the public, merely a nuisance.”**Displayed radar imagery courtesy College of DuPage, Posted by tornado at 06:53 AM**

According to Air Force Major Coble back in 1997, with the fielding of sophisticated Doppler weather radar stations throughout the United States, these devices would give scientists an unprecedented ability to examine the structure and dynamics of weather. Does that also include being able to **WARN** people of impending tornadoes? I have yet to figure out how tornadoes and other extreme weather events can literally sneak up on meteorologists utilizing Doppler radar.

HURRICANES

My focus is primarily with weather phenomenon as it relates to fire behavior and weather conditions, and hurricanes certainly don't fit into that category. However, **there are at least three hurricanes that have always bothered me**. HAARP is certainly powerful enough to affect hurricanes – and has! One is Hurricane Bonnie (1998) and its incredible 59,000' (that's 11 miles) thunderstorm spike rising up out of the eye, a supposed "stable' environment. That's twice as high as Mount Everest. Also see the TRMM documentation on this "hot tower" phenomenon. You have to ask yourself - how can an UNSTABLE thunderstorm emanate from a STABLE environment? Especially one 11 miles high!

Next is Hurricane Mitch in that it refused to break up once it hit land, as is normal. In fact, it swept completely over and ***through*** Central America – that's certainly not normal. Moreover, it also did several **ODD** and **UNCOMMON** things that resulted in the literal chasing down and ultimate sinking of a schooner Fantome, resulting in the deaths of its crew. I remember following this one in the News - even the "News Readers" commented how odd this storm was and how it seemed to be "chasing" the schooner. Moreover, the hurricane ***moved SOUTH*** in the Northern Hemisphere – **not normal** – and it **STALLED in place for over 30 hours** – ***DEFINITELY NOT NORMAL***.

A third hurricane that's remarkable is the one, several years ago, that swept into Mexico and basically made **a surgical-strike**, right up to the porches and sidewalks of the posh resorts, which were virtually untouched, while it wiped out the shanties and make-shift houses of the common folk. Clearly, this was NOT NORMAL. The name of this one escapes me and I'm still researching for its name. You may remember these hurricanes and even pondered on these same anomalies.

An MSNBC article, titled the 2007 "*Hurricanes season was easy for U.S.*" remarks that "the storms were **perplexingly short-lived**, lasting on average just 2.4 days, the lowest ratio since 1977, according to a noted hurricane season forecasting team at Colorado State University. What's up with that? I suggest that it's more odd weather phenomenon resulting from ongoing Weather Modification and not the alleged global warming blather.

Hurricane Mitch and the schooner Fantome debacle

An October 25, 1998, weather forecast told the Captain and Crew of the schooner Fantome, that [Hurricane] Mitch is moving slowly…toward the west-**southwest** near 6 mph…9km/hr. **Hurricane Mitch did something hurricanes in the Northern hemisphere are not supposed to do**. **It incredibly turned south and headed straight for them.**

For 36 hours the S/V *Fantome* (the "S/V" means sailing vessel) fled desperately from Mitch, one of the largest hurricanes ever recorded. **The inexplicable movements of a huge rogue storm**, Captain March and his crew of 30 were now swept up in the ultimate test of men at sea - surviving the full fury of a Category 5 hurricane.

From NOAA geostationary weather satellites at "GOES Hot Stuff," Hurricane Mitch sprawled over much of the Caribbean basin. It was a spiraling dome of thunderstorms 350 miles wide with **a 15-mile eye in its center**, unleashing the energy equivalent of 400,000 Hiroshima bombs. **Hurricanes of this rare intensity send lethal swarms of gravel, splintered wood, and glass shards knifing through the air. The debris blinds people, strips the paint from buildings and flesh from the bones of the dead.**

Throughout the National Weather Service forecast history of Hurricane Mitch you will often see that phrase that "***MITCH REMAINS NEARLY STATIONARY….*"**

Hurricane Mitch unbelievably stalled - for the next 30 hours in one place, in the vicinity of *Fantome*'s last known position. This is not normal folks, but it is doable with HAARP technology.

The schooner's Captain and Crew actually made **five evasive course changes** trying to avoid the storm from **October 25 to 27, 1998 -** all to no avail. It's as if the storm actually chased them down - news commentators at the time even referred to this as well. No one survived. The schooner and its 31 crew members were swallowed by the sea. At 4:30 p.m., October 27, *Fantome's* final transmission was the last anyone would ever hear. http://www.maximonline.com/articles/index.aspx?a_id=2513;

Corzo, Cynthia, et al; *A Cornered Ship, 31 Men and a Date With Doom*, Miami Herald, November 8, 1998, http://www.fortogden.com/fantommiamiherald.html

AFTHOLES, *Windjammer Pages*, http://www.geocities.com/TheTropics/Island/6061/

Carribean Compass, *The Fantome – 'Nowhere to Run'*, http://www.caribbeancompass.com/fantome.htm , December 1998.

HURRICANE BASICS – EYE OF THE STORM is TYPICALLY STABLE

Below is a cross-section of an active hurricane and "its working parts" (see Figure 11.8). The **eye**, the most distinctive feature of a hurricane, is supposed to be a stable environment of tranquility in the midst of the storm. The **eye is a nearly circular cylinder of calm or light winds and partly cloudy skies**, usually with a diameter ranging from 8 to 80 km (5 to 50 mi).

Figure 11.8

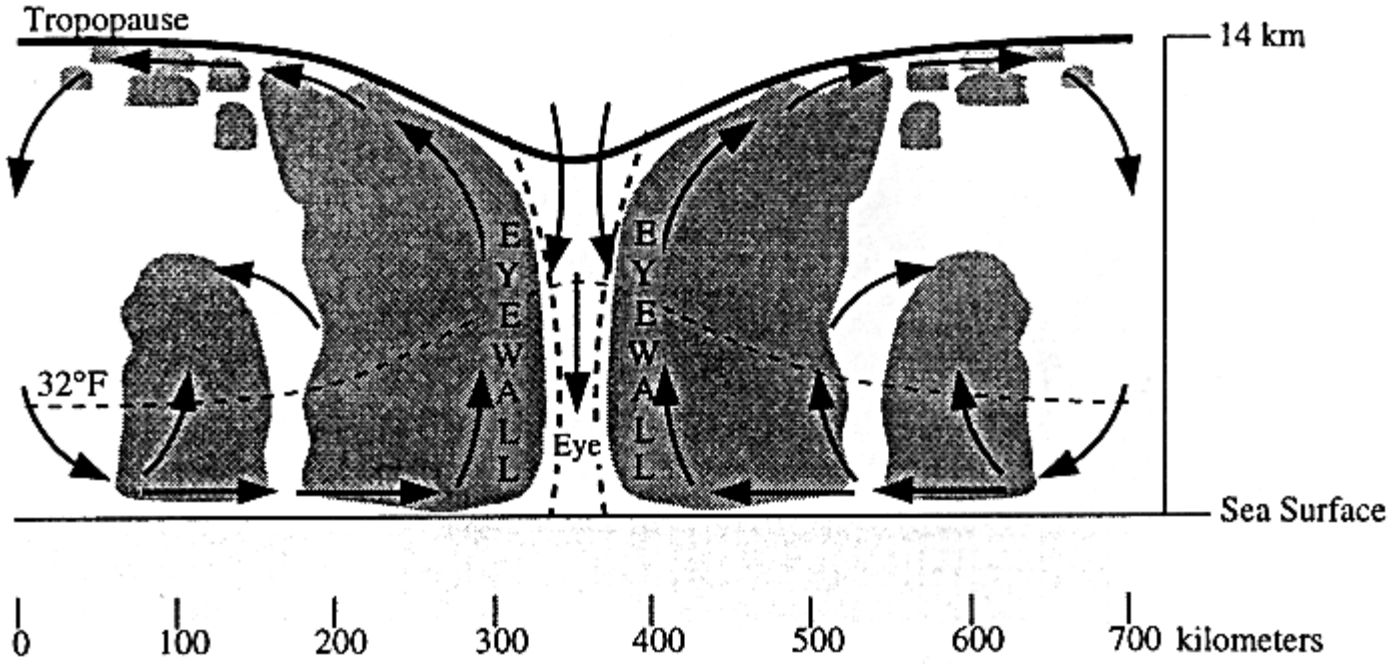


Figure 11.8. Cross-section of a hurricane.

To explain the ***relative calm in the eye***, consider a parcel of air spiraling in toward the center of a hurricane. As the air parcel gets closer to the center, its velocity increases because it will tend to conserve its angular momentum.

So in order not to violate the conservation of energy, the parcel must stop short of reaching the center, creating a cylinder of relative calm.

Typically, in an intense hurricane that has abundant energy, parcels can spiral closer to the center without violating the law of conservation of energy, thereby narrowing the diameter of the eye. Usually, a small, well-defined eye is the signature of a powerful hurricane.

Figure 11.14 shows the three-dimensional air flow in a computer model of a hurricane, demonstrating how parcels of air near the surface spiral inward toward the eye of the storm, stop short of the center, and rise, eventually flowing outward from the eye at the top of the hurricane (also see the cross section in Figure 11.8). These rising parcels of air support **powerful thunderstorms that surround the eye**. This fierce doughnut of thunderstorms, called the eye wall, contains the hurricane's strongest winds and heaviest rains. What about Hurricane Bonnie's 59,000 foot (11 miles) thunderstorm spike from the relative calm of the **center** of the eye!

Note how the clouds surrounding the eye slant upward and away from the storm's center as altitude increases, forming a caricature of a stadium (please use a little imagination here).

To explain this so-called "stadium effect," we rely on the observation that, above approximately the 700-mb level, the strength of a hurricane typically decreases with increasing altitude (that is, the strongest winds surrounding the eye are always found in the lower troposphere, with wind speeds falling off at high altitudes). As evidence, consider color plate 38 below, which shows a series of horizontal radar slices at various altitudes through Hurricane Erin, taken when the hurricane swirled near Florida on August 2, 1995. ***Note how the circular, rain-free zones associated with the eye expand with increasing altitude***. So how does an 11 mile thunderstorm spike, an unstable event, occur in this stable environment?

Plate 38

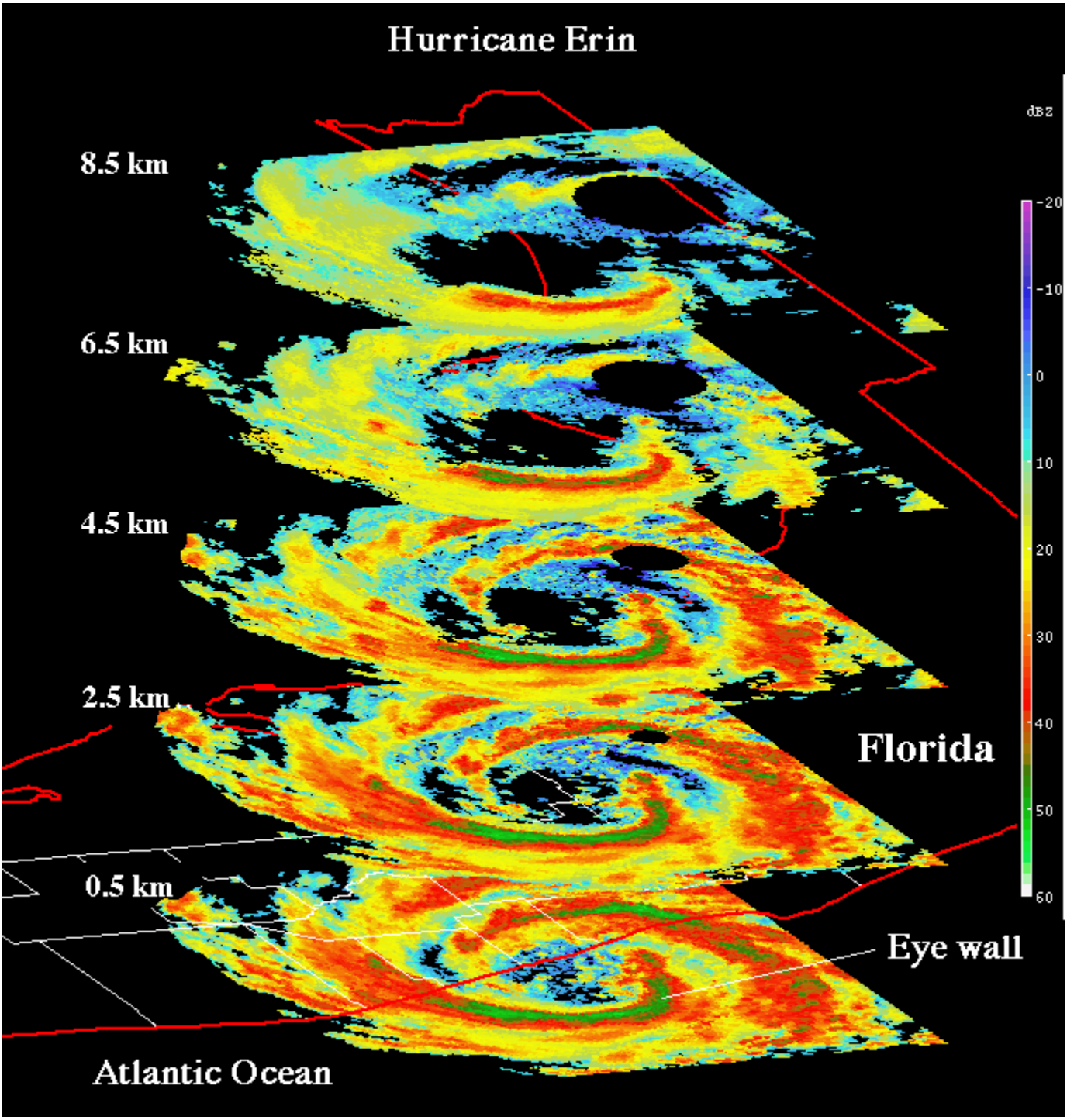
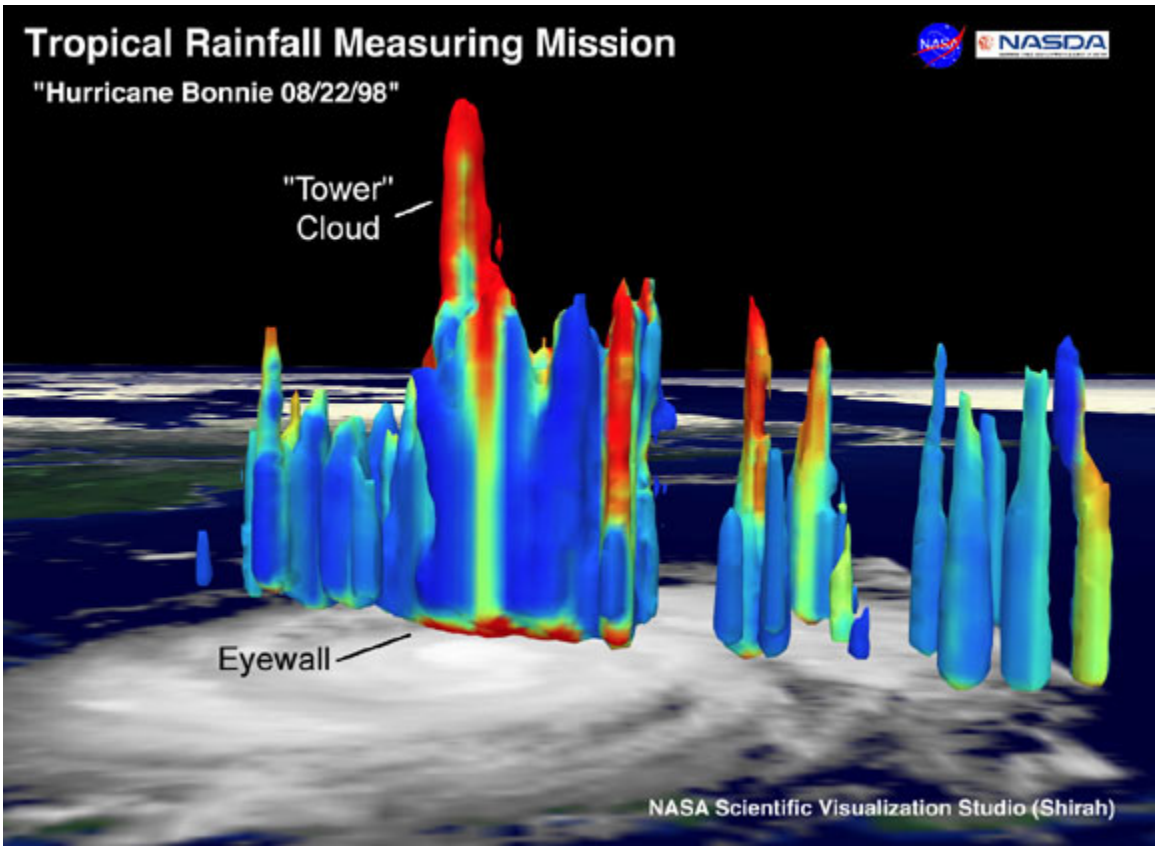


Plate 38. Horizontal radar slices through Hurricane Erin, showing how the **circulation of the storm weakens with increasing height above the ground** (the altitude of each radar slice is shown on the left side of the figure). It is the weakening circulation with increasing altitude that causes the "stadium effect" in the eye-structure of hurricanes. The perfectly circular area of black to the right of the eye is associated with the radar's inability to see precipitation in that region and is not related to the "stadium effect" (NOAA)

When **hurricanes die over land**, their demise is often attributed to the greater roughness of the land which causes the winds to slow. Indeed, **friction** eventually helps to sap hurricane winds. But the primary reason that hurricanes dissipate over land or over higher latitude waters is that they are **removed from their one true source of energy, warm, tropical waters**. So then explain why Hurricane Mitch crawled over Central America.

Hurricane Bertha, in July 1996, can be seen by comparing the two Doppler radar reflectivity images in Color Plate 40 and Color Plate 41, taken seven hours apart surrounding Bertha's **landfall** just east of Wilmington, NC. Although heavy rain persists in the later image, primarily north of the storm center, Bertha's circulation is clearly more ragged just a few hours after coming ashore. And why didn't Hurricane Mitch break up upon landfall? http://www.ems.psu.edu/~nese/ch11/sec13.htm

HOT TOWERS



Follow "Hot Tower" and/or Hurricane Bonnie links below, including YouTube.com. On August 20, 1998, this hurricane, ***an unstable event***, exhibited a 59,000 foot (11 miles!!!!) thunderstorm-spike ***from the eye*** of the hurricane, an ostensibly ***"stable" environment***.

GOES HOT STUFF

Geostationary Operational Environmental Satellites (GOES) is a joint NASA and NOAA program engaging in satellite photography. The following links are from "GOES Hot Stuff", an archive of 1994-2008 satellite photo and movie images. **PLEASE BE PATIENT.**

The links provided will get you to "*GOES Hot Stuff*." Once you link in on any one, you will be able to then just scroll down to any and all of the *italicized* events, e.g. "*January Twisters*" and click on the specific link. To the right of each link is "more" for a brief storyline of the event image(s). Normally, it takes 15-45 seconds to download the photo or movie clip. **JUST BE PATIENT** as it sometimes takes a minute or two on some of the larger downloads and some occasionally several minutes.

Next, enhance the image using the "maximize" button in the upper right of the image or zoom (150%-200%) if you need to, on many of the photos and movies for better, more detailed viewing.

Next, “play” the movie once through to see if you can detect what you’re looking for; then reset and push “play” again, stopping it right-away; and then “**FREEZE-FRAME**” your way through the movie using the right arrow to better visualize each frame. The HAARP grids and grid-lines will be much more evident as you do this.

Be prepared to learn – you will be amazed. After this visual, educational and informative journey, I promise you that you will never look at clouds the same again. And yes, that’s my intent. You must learn the cloud indicators so that you will “**Keep informed on fire weather conditions and forecasts**” in order to “**Base all actions on current and expected fire behavior**” so that you may “**Fight fire aggressively while providing for safety first.**”

January Twisters, January 7-9, 2008, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and lines are very obvious.

Smoking Southern California [fires] color movie, October 21-25, 2007, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines noticeable in some smoke columns and approaching clouds from the west.

Smokin Florida, May 11, 2007, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are readily visible in the smoke column once image is zoomed out to 150% to 200%.

Smoke-filled West, July 9, 2007, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are readily visible in smoke columns once image is zoomed out to 200% to 400%.

Eagle Pass [TX] Tornado Outbreak, April 24, 2007, VERY IMPRESSIVE, http://goes.gsfc.nasa.gov/text/hotstuff.html , series of 24 tornadoes in Colorado, Kansas, Oklahoma, and Texas according to NOAA; this is rife with HAARP grids and grid-lines.

Crossing Jets Over the Gulf Coast, February 28, 2007, http://goes.gsfc.nasa.gov/text/hotstuff.html , rife with HAARP grids and grid-lines.

East Coast “thundercane”, November 15-17, 2006, http://goes.gsfc.nasa.gov/text/hotstuff.html , NOAA **asserts “death and destruction comparable to that done by an average hurricane”**, HAARP grids and grid-lines evident during the life of the storm.

Another rope-like cloud, October 28, 2006 **and** *Rope-like cloud*, September 19, 2006, both at http://goes.gsfc.nasa.gov/text/hotstuff.html , AARP grids and grid-lines evident when zoomed to 200%.

Messy summer weather, July 9, 2006, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines very evident when zoomed to 200%.

Arizona Dust Storms, June 7, 2006, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines very evident; NOTE: storm approaching from SE as dust storm moves to NW.

52 tornadoes in 24 hours [SE], April 8, 2006, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident during storm movement. Moreover, 515 hailstorms and 160 wind damage reports. Yeah, this is normal!

Midwest tornado outbreak, March 12, 2006, http://goes.gsfc.nasa.gov/text/hotstuff.html , during March 11-12 and 12-13, 2006 over 100 tornadoes were sighted in the Midwest, mainly Missouri, HAARP grids and grid-lines evident during the entire storm movement.

Double-eyed Hurricane Wilma, October 25, 2006, definitely an **unusual** event, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident.

Wintry jet [stream]; December 14, 2003, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very clear and distinct.

Squall line stuns Washington DC, August 26, 2003, "**UNPREDICTED**"???? http://goes.gsfc.nasa.gov/text/hotstuff.html, HAARP grids and grid-lines are fairly obvious in spite of black and white imagery and quick clip; NOAA asserts that this was "**unpredicted**" and "raced down on the capitol from West Virginia …"

[Hurricane] Isabel, The Movie; September 10-19, 2003, **VERY IMPRESSIVE**, http://goes.gsfc.nasa.gov/text/hotstuff.html , movie footage of this several-day, progressive cyclonic activity. TAKES SEVERAL MINUTES TO DOWNLOAD – BUT WORTH IT.

Hurricane Isabel's "pinwheel eye"; September 10, 2003, **VERY IMPRESSIVE and UNUSUAL**, http://goes.gsfc.nasa.gov/text/hotstuff.html , black and white satellite photo. NASA asserts that even "at category 5 (155 mph winds), **sub-storms** in the eye of the hurricane persist in **organizing themselves into star-like pin-wheeled shapes**."

Gravity winds over Mexico, December 16, 2002, EXTREMELY IMPRESSIVE http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are extremely obvious.

Santa Ana winds, November 27, 2002, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines very evident.

[Another] Midwest tornado outbreak, November 10, 2002, VERY UNUSUAL, http://goes.gsfc.nasa.gov/text/hotstuff.html ,70 tornadoes raged throughout the night from Ohio to Mississippi, HAARP grids and grid-lines are very evident.

Midwest tornadic line, November 24, 2001, http://goes.gsfc.nasa.gov/text/hotstuff.html , 45 tornadoes and hundreds of high winds and large hail from Texas to Minnesota, HAARP grids and grid-lines are very evident; NOAA claims these are "nice examples of high-altitude ripples (gravity waves) moving out from over-shooting cloud tops."

Quebec [Canada] Wildfires, multi-spectral color, July 6, 2002 **and** *Arizona Wildfires*, June 22-24, 2002, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident.

Tornadoes across the South, November 24, 2001, Mississippi and Alabama, http://goes.gsfc.nasa.gov/text/hotstuff.html, HAARP grids and grid-lines are fairly evident.

Gravity winds in Hurricane Gordon; September 16, 2000, UNMISTAKENLY HAARP, http://goes.gsfc.nasa.gov/text/hotstuff.html , yet NASA states "An **explosive convective tower in the middle of the storm** popped up a few hours earlier, sending out dozens of gravity waves in the atmosphere, like ripples in a pond."

Wildfire closes Los Alamos NM; May 10, 2000, Cerro Grande Fire, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are evident near end of this short movie clip.

[Two] Tornadoes rip Ft Worth [TX]; March 28, 2000, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids fairly evident even with grainy black and white imagery; Note that HAARP grids and grid-lines **closely precede** tornadoes and other cyclonic activity.

Complex clouds off [San Francisco Bay] California; February 1, 2000, http://goes.gsfc.nasa.gov/text/hotstuff.html , ***BIZARRE*** HAARP grids and grid-lines are **EXTREMELY OBVIOUS** even with somewhat grainy black and white photo satellite imagery; NOAA claims these are "Clouds of many kinds and heights [and they] move [and] evolve in this one movie." Yeah right!

Salt Lake City tornado from both GOES [satellites]; August 11, 1999, NOAA-classified it as a F2 whirlwind; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident even with somewhat grainy black and white footage. Meteorologists called this a **"rare tornado"** that occurred **"without warning" and many meteorologists stated that the Salt Lake City Basin is not at all conducive to tornado development. On the early evening of August 10th, I observed thick, dark, greenish tornado clouds with intense HAARP activity pass over the Sadler Fire ICP (northeast NV) from the southwest and moving to the northeast.**

Red-green stereo movie of May 3rd Oklahoma tornado; May 3, 1999, **extremely fast movie clip**, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident in spite of quick clip.

Tornado outbreak in western Iowa, May 16, 1999, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident even with grainy black and white imagery; Note that HAARP grids closely both precede and then follow this mile-wide F4 tornado and other cyclonic activity.

Killer tornado casts a long shadow over Oklahoma City; May 3, 1999, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident even with grainy black and white photograph.

Killer tornado casts a long shadow over Oklahoma City; *High resolution noon to sunset **and** low resolution infrared movie noon to midnight*, May 3, 1999, more of the above, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in high resolution but faint, yet distinguishable in low resolution, even with grainy black and white movie imagery.

GOES-8/-10 red/green stereo image [of a Killer tornado over Oklahoma City]; May 3, 1999, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are EXTREMELY OBVIOUS even as a single satellite image.

*Florida firestorms **and** Florida firestorm movie;* April 19, 1999, one black and white photo and one color movie clip, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in photo even with grainy black and white imagery and clearly visible in movie clip, both on northern fire and southern cloud banks.

Killer tornadoes near Cincinnati [OH]; April 9, 1999, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in this fast-moving color movie clip.

Killer tornadoes in Arkansas [and Tennessee]; January 21, 1999, color and infrared movie clip, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident and **note storm approaches from west, then southwest, then south**.

Giant [1000 mile] smoke plume over Alaska; October 8, 1998, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grid-line very evident in a series of separate color, black and white, graphics, and write-ups attempting to explain this anomaly. This is clearly a HAARP grid-line extending from Canadian border through Alaska to Kodiak Island. The author tries to explain - "Evidently, there was **no lateral plume dispersion** over the 1000 mile transport range."

Florida fires, color movie; July 3, 1998; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident in the second half of this color movie clip with intense convection columns.

Florida fires close I-95; July 2, 1998, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly obvious in the smoke columns and some clouds in this color photo, especially when zooming to 150% to 200%.

Smoke at Titusville, Florida; June 7, 1998, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in the approaching and nearby clouds, especially when zooming to 150% to 200%.

GOES-10 [Series] visible and fast-scan tornadoes in Minnesota, Mississippi, North Carolina, and Georgia; March 20 to 29, 1998, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident even with grainy black and white movie imagery.

Criss-crossing clouds over Florida; March 8, 1998, "cloud streaks and waves"???? http://goes.gsfc.nasa.gov/text/hotstuff.html , this black and white photo clearly reveals HAARP grids and grid-lines.

Tornadoes hit Louisiana, [then into Mississippi and Georgia], November 21, 1997, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident from the outset, even with somewhat grainy black and white movie imagery.

Contrails in the "split window"; November 9, 1997, http://goes.gsfc.nasa.gov/text/hotstuff.html , significant chemtrails very evident even with black and white photo imagery.

Contrails [extend almost] to the limb; September 19, 1997, "***man-made cirrus"????*** http://goes.gsfc.nasa.gov/text/hotstuff.html , chemtrails are very evident along with HAARP grids and grid-lines off the California coast, even with black and white photo imagery. NOAA asserts that these clouds are "currently one of the 'hot' questions in atmospheric science."

"Fairy ring" of thunderstorms in Pennsylvania; July 9, 1997, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines fairly evident even with black and white photo imagery.

June from GOES-8; July 6, 1997; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines fairly evident with this color satellite movie, mainly those approaching the US from the Northwest; **impressive world view in motion**.

Killer tornadoes in [Jarrell] Texas; May 27, 1997, http://goes.gsfc.nasa.gov/text/hotstuff.html , impressive HAARP grids and grid-lines are fairly evident with this series of black and white and color satellite movie clips of these rapidly building and intense tornadoes; according to NOAA, "This [Jarrell] tornado … buckled asphalt roads**, peeled the bark off trees, and stripped the flesh from the skulls off cattle [trapped] in its path. Some cars** in the path of the tornado **were never found."** Yeah, that's normal!

Thunderstorms chase Toto across Kansas; May 17, 1998, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines fairly evident even in this somewhat grainy black and white movie clip.

Contrails burn cirrus movie; May 10, 1997, http://goes.gsfc.nasa.gov/text/hotstuff.html , NOAA states these are "**burn holes**" in the skies over Georgia; HAARP grids and grid-lines fairly evident even in this somewhat grainy black and white movie clip.

Red-green stereo images of hurricanes; February 23, 1997; VERY IMPRESSIVE, http://goes.gsfc.nasa.gov/text/hotstuff.html , color satellite photos of several hurricanes.

Big brush fires in Malibu [CA]; October 21, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html, chemtrail and/or HAARP grid-line cross very evident in the upper-left of this color satellite photo.

Tornadic super-cell southeast of Denver [CO] airport; August 9, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident to the northeast in Wyoming storms, even with grainy black and white satellite photo imagery.

Tornadic storms in Baltimore [MD] -Washington [DC] region; July 19, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in clouds, even with the grainy black and white satellite movie imagery.

GOES-8 movie during Fairfax VA tornado; June 25, 1996; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in clouds to the southeast, even with the fast-moving grainy black and white satellite movie imagery.

Summer thunderstorms in the mountain west; June 16, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html, HAARP grids and grid-lines are fairly evident in clouds in the lower right, even with the fast-moving grainy black and white satellite movie imagery.

GOES-8 rapid scans of Kansas thunderstorms; June 1, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are clearly evident in the clouds, even with somewhat grainy black and white satellite movie.

"Train" of thunderstorms across Missouri; April 29, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are very evident in the surrounding clouds, in this black and white satellite photo imagery. **NOTE the "dry/clear slots" encircling the several thunderstorms.**

Spring storm development in the Midwest; March 20, 1996; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are fairly evident in clouds, even with the fairly fast-moving grainy "false color" satellite movie imagery.

Brushfires in Oklahoma, February 27, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grid-lines are evident in smoke columns, even with the fairly fast-moving, somewhat grainy black and white satellite movie imagery.

***[HAARP]** Cloud-threatened Mid-Atlantic states*; January 13, 1996, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are readily obvious in the surrounding clouds in this black and white satellite photo imagery.

Movie of storm and tornado outbreak in Georgia [and northern Florida] on May 15th; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grid-lines are clearly evident in clouds, in this fairly fast-moving black and white satellite movie imagery.

*Camp Verde [**Africa**] mystery storm*; http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grid-lines are fairly obvious in this somewhat grainy black and white photo. NOAA states that "at 15N, there is not enough coriolis force to make a storm spin very much. So, how did it get that way? "'The answer is blowin' in the wind.'"

Jet contrails all over Ohio on [Christmas] Day; December [25], 1994, http://goes.gsfc.nasa.gov/text/hotstuff.html , numerous chemtrails are readily obvious in the lower portion of the black and white satellite photo imagery.

Thunderstorms over the Midwest at sunset; July 14, 1994, http://goes.gsfc.nasa.gov/text/hotstuff.html , HAARP grids and grid-lines are readily obvious in this black and white satellite photo imagery, especially when enlarged.

GOES satellite color photo imagery of the "**earliest tornado on record** at Milwaukee, Wisconsin" showing very obvious dry line and dry slot in water vapor image, http://cimss.ssec.wisc.edu/goes/misc/000308.html , March 8, 2000.

CONCLUSION

Since 1996, we've witnessed, heard from other credible, veteran Fireline Supervisors who have witnessed, and/or researched some of the most unprecedented fire behavior we can remember, and every year since then. This extreme fire behavior has literally become "the norm" - and it generally manifests itself in the form of intense, very large fire whirls, actually more like "fire tornadoes," and sometimes even fire storms. Just think back a few years ago, to the video of the radical fire tornado and fire whirls at 10,000 feet elevation on the Johnson Fire, on the Dixie NF, in Utah. In my opinion, this is definitely a direct result of ongoing Weather Modification. I think, quite possibly, the fuels beds are being adversely altered as a result of almost continuous aerial spraying (chemtrails) of many types of flammable metals; the likes of trietylaluminum, aluminum, magnesium, and strontium combined obviously with the heavy fuel loadings. It makes sense to me merely based on the research of Mark Purdey and his CWA, TSE findings in the US and Canada.

Some of you may recall the August 14, 1996, Charlton Fire in Oregon, referenced in my 1996 paper. In spite of record snows the winter before, this fire burned as if it were drought conditions. You cannot honestly say it was solely because of heavy fuel loading, even though that is a problem just about everywhere. This fire on the Willamette and Deschutes NF's, exhibited unprecedented fire behavior, such as stripping bark from green trees as the updrafts sucked rocks off the ground, uprooted old-growth timber and laid them down in a circular pattern, vaporized nearby ponds and streams, and slung hot mud for miles, including on an airborne helicopter. At the time, it was the hottest recorded infra-red satellite signature of a wildland fire. The FBAN described this as an "extremely rare event."

This type of fire behavior is "the norm" anymore! I've seen this type of fire behavior every year since then – in fact, several times a year now, and I'm sure you have as well. In 2003, in the same area, the B & B Complex exhibited very similar, extremely intense and radical fire behavior – several times in the 14 days we worked that fire. Recall, all of the extreme fire behaviors and fire tornadoes you've witnessed in the sagebrush fuels of the Intermountain Region, and every other fire region you've worked in for that matter. You know what I'm talking about. The list goes on and on and it is indeed continuing and increasing. Pay particular attention to how these unusual weather phenomenon are described verbally and in writing, including research papers and scientific periodicals, by laymen as well as professionals, researchers, and scientists.

Clearly, HAARP technology has the capability to alter a region in the Earth's atmosphere, ionosphere, and/or magnetosphere by heating these regions using electron cyclotrone reasonance, altering plasma in an upward helical motion; whereby the plasma rises, and horizontal winds are drawn in to replace the rising plasma and to form new plasma; on the same order of magnitude as the total zonal kinetic energy of known stratospheric winds known to exist, effectively lifting the ionosphere.

Winds can be produced at selected locations and altitudes, which can then be used in establishing weather patterns. Moreover, large regions of the atmosphere can be lifted to an unexpectedly high altitude to create cross-winds. Weather modification is then possible by altering upper atmosphere wind patterns by constructing one or more moving plumes.

My favorite is the simulated "heave" type detonations without the adverse effects of nuclear fallout. All of this indicates to me why HAARP-like perturbations and activity are some of the major reasons why we've been experiencing fire tornadoes and fire storms, due to any number of modified weather-related reasons. This certainly has my full attention, and should concern all wildland Fire Supervisors. After all, we know that the wind is most often the greatest impact and least predictable weather factor and fire behavior indicator, and next are the temperature and the humidity. I believe that HAARP adversely affects them all.

The North Neola Fire created tornado-like winds on June 29, 2007

Trent Nelson, Salt Lake City Tribune via AP (photo probably taken 6/30/07)

On June 29, 2007, on the North Neola Fire, Uinta-Ouray BIA land east of Salt Lake City, Utah, an **intense Fire Tornado roared downhill** into a short-stubble, green hay field [what should have been an ample Safety Zone] and killed three individuals. The fire exhibited extreme fire behavior as it became plume dominated that afternoon and completely consumed the larger, 1000-hour fuels.

YouTube.com video clip: http://www.youtube.com/watch?v=Bn4cfSAMv7I , real active North Neola fire behavior at about 2:30 in video

Fletcher Fire created tornado-like winds on July 16 and 17, 2007

Credit: Don Smith (retired), Oregon Dept. of Forestry, view pictures , check out the "view pictures" link to see associated tree damage and more vortices

Fletcher Fire July 16

Tornado-like fire whirl

The Fletcher Creek, on both July 16 **and** 17, 2007, exhibited ***tornado-like behavior*** which up-rooted trees and destroyed seven structures, near Davis, CA in Modoc County. "This was **the most extreme fire behavior I've seen in 30 years**," said Barry Hansen, Fire Management Officer for the Forest Service's Lakeview Ranger District.

Do you see what I mean? There are just too many fires these days exhibiting this type of radical fire behavior. There's something to be said about Weather Modification and what's taking place on our firelines, besides the incessant blather about unusual fuel buildup and global warming. I think this is what we'll have to accept and consider as normal, unless we can possibly change things through our democratic process.

Our elected officials are trying to pass a couple of Weather Modification bills. They have euphemistically changed the titles to "Mitigation" rather than the more-accurate Modification. The House of Representatives is pushing for HR 3445, Weather Mitigation [Modification] Research and Technology Transfer Authorization Act of 2007, introduced by Rep. Mark Udall [D- CO]. http://www.govtrack.us/congress/billtext.xpd?bill=h110-3445 . The Senate is vying for S-1807, Weather Mitigation and Research and Development Policy and Authorization Act of 2007, introduced by Senator Kay Hutchison [R-TX], http://www.govtrack.us/congress/billtext.xpd?bill=s110-1807 . What was the purpose of changing the titles from "Modification" to "Mitigation?" Fortunately, both these bills received heavy opposition from the public and both bills languished and lapsed in 2007. I'm sure they'll be back in 2008.

Please contact your elected officials and let them know you oppose these bills or whatever they decide to call the 2008 version. Also let them know that you oppose the chemtrail spraying, a definite health risk and all other types of adverse Weather Modification, like HAARP. If you are concerned about some resistance or disbelief or that you may stand out in the group, just remember that you're a Hot Shot for God's sake, and you should be used to a little controversy! Stand up for what is right and do the right thing.

Be patient following the links, as many of them take a little time. If a link doesn't work, then search for the operative words in the article or title and you'll find it. Just keep searching and you'll find it – and more. Be sure and go to many of the European links, e.g. Germany, Italy, France, Netherlands, and others, as Weather Modification is occurring there as well. In fact, they are alarmed and upset with the Americans and how complacent we are and how we don't seem to be taking this as serious as they are.

When I started writing this a few weeks ago, there is no way I intended this paper to be this long, but the more I researched, the more I had to include. There is so much information out there yet to learn.

Remembering Paul Gleason, he asked us all to become "students of fire." Well, I'm asking you all to become students of Weather Modification and its effects on fire. Continue to educate and inform yourselves and those you supervise and work with regarding these new indicators. The electronic-version of this paper is designed to be interactive, so that you can follow the many links, and see so much more detail in the color photographs and movie clips.

Remember to "***Look up***, ***Look Down***, and ***Look Around***" in this Brave New World of Weather Modification and Modern Fire Behavior. And with this newfound knowledge, buttressed by your experience, apply what you've learned here by (1) ***Keeping informed on fire weather conditions and forecasts***, while (2) ***Basing all actions on the current and expected behavior of the fire***, (3) in situations where you may be ***Unfamiliar with weather and local factors influencing fire behavior***, in order to better (4) ***Fight fire aggressively having provided for safety first***.

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Due Diligence

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Disclaimer

The opinions and assertions presented in this document are strictly those of the author, and should not be construed as being official or reflecting the views of a small, rural Arizona Fire District or any Federal Agency. As I stated early on – we're on our own as far as the weather goes – but we **must** still rely on the assistance and documents of **CREDIBLE** and **COMPETENT** weather forecasters, meteorologists, Fire Behavior Analysts, and the like so that you can use the new indicators knowledge you will acquire.

Moreover, all information posted in this paper is the opinion of the author and is provided for educational purposes only. It is not to be construed as medical advice. Only a licensed medical doctor can legally offer medical advice in the United States. Consult the healer of your choice for medical care and advice.

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