

Carnicom Institute Research

2001

Acknowledgements

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PARTICULATE PHOTOGRAPHS

carnicominstitute.org/particulate-photographs/

PARTICULATE PHOTOGRAPHS Jan 04 2001 Clifford E Carnicom

The following are video stills extracted from a video segment made on Jan 03 2001 in Santa Fe NM. The evidence provided by these images further substantiates those demands which now exist for a formal investigation into drastic atmospheric changes which, by all evidence available, are a direct result of aircraft aerosol operations imposed without citizen consent.



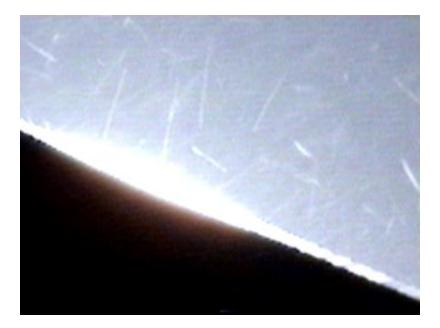
Video still which shows the "clear" blue sky of Santa Fe at the time of the video shoot. Jan 01 2001, two days prior, was a day of intensive aerosol activities over the Santa Fe and Albuquerque area. No wind or visible dust in the atmosphere on this day.



Video still which shows the arrangement of the sun and position of the viewer at a low level of magnification.



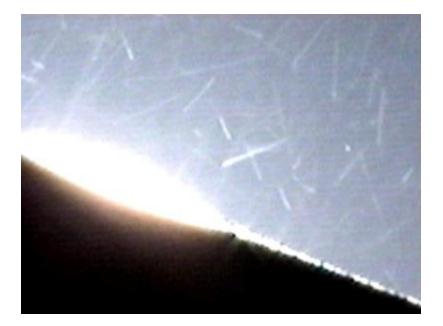
Abundant particulate matter visible within the intensely backlit section immediately adjacent to the roof edge and solar corona. Normal lighting. Magnification approximately 40x.



Abundant particulate matter visible within the intensely backlit section immediately adjacent to the roof edge and solar corona. Normal lighting. Magnification approximately 40x.



Abundant particulate matter visible within the intensely backlit section immediately adjacent to the roof edge and solar corona. Normal lighting. Magnification approximately 40x.



Abundant particulate matter visible within the intensely backlit section immediately adjacent to the roof edge and solar corona. Normal lighting. Magnification approximately 40x.



Abundant particulate matter visible within the intensely backlit section immediately adjacent to the roof edge and solar corona. Negative lighting. Magnification approximately 40x.



Abundant particulate matter visible within the intensely backlit section immediately adjacent to the roof edge and solar corona. Negative lighting. Magnification approximately 40x.

Full credit for the methods and observations recorded on this page are extended to a member of the message board by the name of "Looookinup", as well as to several other members that have substantiated the efforts made to identify particulate matter now readily visible in our skies. Please use extreme caution within any efforts to duplicate these observations, especially if magnifying optics are being used. It is essential that the sun never be viewed directly, especially with magnification. The corona of the sun is what will make the particles visible.

Future research methods will include direct filtering of the atmosphere. Current research indicates that the most likely size of the particles being observed is on the order of sub-micron to several microns in size. The role of the so-called "plasma frequency" is also under investigation. Particles appear to be white, highly reflective, electrically charged and likely of a metallic nature. Citizens, professionals and activists across the country are encouraged to participate in this nationwide effort of research, disclosure and establishment of accountability. Direct demands to Christine Todd Whitman, Administrator of the United States Environmental Protection Agency, for a formal investigation into the evidence available thus far are also invited. Carol M. Browner, the previous EPA administrator, has recently reiterated the claim that this national agency for public welfare remains "unaware" of any aircraft aerosol operations occurring within our skies. Clifford E Carnicom Jan 04 2001

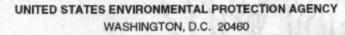
EPA PERPETUALLY "UNAWARE"

carnicominstitute.org/epa-perpetually-unaware/

EPA PERPETUALLY "UNAWARE" Jan 09 2001 Clifford E Carnicom

The following letter has recently been received from the office of Carol M. Browner, Administrator of the U.S. Environmental Protection Agency. This further records the state of unawareness that Carol M. Browner remains in, despite initial notification of accumulating evidence on the aerosol issue on Dec 09, 1999, more than one year ago. A chronology of the communication between David Peterson, myself, and the EPA is available on this website. Throughout the last year several correspondences have been received which continue to use the phrase that the EPA is "unaware" of any aircraft aerosol operations being conducted across the nation. In addition, Carol M. Browner and the office of the EPA refuses to acknowledge the existence of a physical sample sent to her by certified mail on June 20, 2000, and there remains a patent refusal to identify that material as requested and to release the results of such testing to the American public.

> Clifford E Carnicom Jan 09 2001





DEC 21 2000

Clifford Carnicom P.O. Box 4653 Santa Fe, NM 87502

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Dear Mr. Carnicom:

This letter responds to the many identical letters dated October 31, 2000, and addressed to Carol M. Browner, Administrator of the Environmental Protection Agency, and others regarding the issue of "aerial sprayings occurring over the United States." As you know, these letters were generated from your website www.carnicom.com/contrails.htm. The Administrator asked that I respond to these letters for her.

These letters and information on the above website claim that aircrafts are spraying chemical, biological or other toxic substances from high altitudes over the U.S. and harming people. As you are aware, the Agency's Office of Air and Radiation (February 22 and 25 and June 2000) and the Office of Pesticide Programs (December 9, 1999) have responded to prior correspondence from you about these same claims.

EPA is not involved in or aware of any application or aerial spraying of chemical, biological, or toxic substances as claimed by your past correspondence or on the above or other websites. The Agency takes very seriously its mission to protect human health and the environment from toxic substances and to carry out and enforce laws pertaining to this mission. The activity described in your communications is obviously contrary to our mission and responsibilities. Illegal applications or releases of toxic substances are investigated by enforcement authorities at the federal and/or state level(s) and enforcement action is taken, if appropriate, according to the evidence and investigation. Since you believe the aerial contrails are a result of illegal releases of chemicals or biological substances, you may wish to contact the appropriate state regulatory agency for their consideration.

The Agency tries to respond to all correspondence however, to conserve resources I suggest that you post my response on the above website as a means to more efficiently respond to the many individuals who sent your form letter.

Sincerely,

Jay Ellenberger, Associate Director Field and External Affairs Division Office of Pesticide Programs

EASTLUND BARIUM REFERENCE

carnicominstitute.org/eastlund-barium-reference/



EASTLUND BARIUM REFERENCE from http://www.visitations.com/mindnet/MN151.HTM

MindNet Journal – Vol. 1, No. 51

VERICOMM / MindNet "Quid veritas est?"

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[HAARP]

UNITED STATES PATENT

Eastlund

Patent Number: 4,686,605 Date of Patent: Aug. 11, 1987

METHOD AND APPARATUS FOR ALTERING A REGION IN THE EARTH'S ATMOSPHERE, IONOSPHERE, AND/OR MAGNETOSPHERE

Inventor: Bernard J. Eastlund, Spring, Tex.

Assignee: APTI, Inc., Los Angeles, Calif.

Appl. No.: 690,333

Filed: Jan. 10, 1985

References Cited

PUBLICATIONS

Liberty Magazine, (2/35) p. 7 N. Tesla. New York Times (9/22/40) Section 2, p. 7 W. L Laurence.

New York Times (12/8/15) p. 8 Col. 3.

Primary Examiner–Salvatore Cangialosi Attorney, Agent, or Firm–Roderick W. MacDonald

ABSTRACT

A method and apparatus for altering at least one selected region which normally exists above the earth's surface. The region is excited by electron cyclotron resonance heating to thereby increase its charged particle density. In one embodiment, circularly polarized electromagnetic radiation is transmitted upward in a direction substantially parallel to and along a field line which extends through the region of plasma to be altered. The radiation is transmitted at a frequency which excites electron cyclotron resonance to heat and accelerate the charged particles. This increase in energy can cause ionization of neutral particles which are then absorbed as part of the region thereby increasing the charged particle density of the region.

15 Claims, 5 Drawing Figures

METHOD AND APPARATUS FOR ALTERING A REGION IN THE EARTH'S ATMOSPHERE, IONOSPHERE, AND/OR MAGNETOSPHERE

DESCRIPTION

1. Technical Field

This invention relates to a method and apparatus for altering at least one selected region normally existing above the earth's surface and more particularly relates to a method and apparatus for altering said at least one region by initially transmitting electromagnetic radiation from the earth's surface essentially parallel to and along naturally-occurring, divergent magnetic field lines which extend from the earth's surface through the region or regions to be altered.

2. Background Art

In the late 1950's, it was discovered that naturally-occuring belts exist at high altitudes above the earth's surface, and it is now established that these belts result from charged electrons and ions becoming trapped along the magnetic lines of force (field lines) of the earth's essentially dipole magnetic field. The trapped electrons and ions are confined along the field lines between two magnetic mirrors which exist at spaced apart points along those field lines. The trapped electrons and ions move in helical paths around their particular field lines and "bounce" back and forth between the magnetic mirrors. These trapped electrons and ions can oscillate along the field lines for long periods of time.

In the past several years substantial effort has been made to understand and explain the phenomena involved in belts of trapped electrons and ions, and to explore possible ways to control and use these phenomena for beneficial purposes. For example, in the late 1950's and early 1960's both the United States and U.S.S.R. detonated a series of nuclear devices of various yields to generate large numbers of charged particles at various altitudes, e.g., 200 kilometers (km) or greater. This was done in order to establish and study artificial belts of trapped electrons and ions. These experiments established that at least some of the extraneous electrons and ions from the detonated devices did become trapped along field lines in the earth's magnetosphere to form artificial belts which were stable for prolonged periods of time. For a discussion of these experiments see "The Radiation Belt and Magnetosphere", W. N. Hess, Blaisdell Publishing Co., 1968, pps. 155 et sec.

Other proposals which have been advanced for altering existing belts of trapped electrons and ions and/or establishing similar artificial belts include injecting charged particles from a satellite carrying a payload of radioactive beta-decay material or alpha emitters; and injecting charged particles from a satellite-borne electron accelerator. Still another approach is described in U.S. Pat. No. 4,042,196 wherein a low energy ionized gas, e.g., hydrogen, is released from a synchronous orbiting satellite near the apex of a radiation belt which is naturally-occurring in the earth's magnetosphere to produce a substantial increase in energetic particle precipitation and, under certain conditions, produce a limit in the number of particles that can be stably trapped. This precipitation effect arises from an enhancement of the whistler-mode and ion-cyclotron mode interactions that result from the ionized gas or "cold plasma" injection.

It has also been proposed to release large clouds of barium in the magnetosphere so that photoionization will increase the cold plasma density, thereby producing electron precipitation through enhanced whistler-mode interaction.

However, in all of the above-mentioned approaches, the mechanisms involved in triggering the change in the trapped particle phenomena must be actually positioned within the affected zone, e.g., the magnetosphere, before they can be actuated to effect the desired change.

The earth's ionosphere is not considered to be a "trapped" belt since there are few trapped particles therein. The term "trapped" herein refers to situations where the force of gravity on the trapped particles is balanced by magnetic forces rather than hydrostatic or collisional forces. The charged electrons and ions in the ionosphere also follow helical paths around magnetic field lines within the ionosphere but are not trapped between mirrors, as in the case of the trapped belts in the magnetosphere. since the gravitational force on the particles is balanced by collisional or hydrostatic forces.

In recent years, a number of experiments have actually been carried out to modify the ionosphere in some controlled manner to investigate the possibility of a beneficial result. For detailed discussions of these operations see the following papers: (1) Ionospheric Modification Theory; G. Meltz and F. W. Perkins: (2) The Platteville High Power facility; Carrol et al.; (3) Arecibo Heating Experiments; W. E. Gordon and H. C. Carlson, Jr.; and (4) Ionospheric Heating by Powerful Radio Waves; Meltz et al., all published in Radio Science, Vol. 9, No. 11, November, 1974, at pages 885-888; 889-894; 1041-1047; and 1049-1063, respectively, all of which are incorporated herein by reference. In such experiments, certain regions of the ionosphere are heated to change the electron density and temperature within these regions. This is accomplished by transmitting from earth-based antennae high frequency electromagnetic radiation at a substantial angle to, not parallel to, the ionosphere's magnetic field to heat the ionospheric particles primarily by ohmic heating. The electron temperature of the ionosphere has been raised by hundreds of degrees in these experiments, and electrons with several electron volts of energy have been produced in numbers sufficient to enhance airglow. Electron concentrations have been reduced by a few percent, due to expansion of the plasma as a result of increased temperature.

In the Elmo Bumpy Torus (EBT), a controlled fusion device at the Oak Ridge National Laboratory, all heating is provided by microwaves at the electron cyclotron resonance interaction. A ring of hot electrons is formed at the earth's surface in the magnetic mirror by a combination of electron cyclotron resonance and stochastic heating. In the EBT, the ring electrons are produced with an average "temperature", of 250 kilo electron volts or kev (2.5 X 10^9K) and a plasma beta between 0.1 and 0.4; see, "A Theoretical Study of Electron Cyclotron Absorption in Elmo Bumpy Torus", Batchelor and Goldfinger, Nuclear Fusion, Vol. 20, No. 4 (1980) pps. 403-418.

Electron cyclotron resonance heating has been used in experiments on the earth's surface to produce and accelerate plasmas in a diverging magnetic field. Kosmahl et al. showed that power was transferred from the electromagnetic waves and that a fully ionized plasma was accelerated with a divergence angle of roughly 13 degrees. Optimum neutral gas density was 1.7 X 10^14 per cubic centimeter; see, "Plasma Acceleration with Microwaves Near Cyclotron Resonance", Kosmahl et al., Journal of Applied Physics, Vol. 38, No. 12, Nov., 1967, pps. 4576-4582.

DISCLOSURE OF THE INVENTION

The present invention provides a method and apparatus for altering at least one selected region which normally exists above the earth's surface. The region is excited by electron cyclotron resonance heating of electrons which are already present and/or artificially created in the region to thereby increase the charged particle energy and ultimately the density of the region.

In one embodiment this is done by transmitting circularly polarized electromagnetic radiation from the earth's surface at or near the location where a naturally-occurring dipole magnetic field (force) line intersects the earth's surface. Right hand circular polarization is used in the northern hemisphere and left hand circular polarization is used in the southern hemisphere. The radiation is deliberately transmitted at the outset in a direction substantially parallel to and along a field line which extends upwardly through the region to be altered. The radiation is transmitted at a frequency which is based on the gyro frequency of the charged particles and which, when applied to the at least one region, excites electron cyclotron resonance within the region or regions to heat and accelerate the charged particles in their respective helical paths around and along the field line. Sufficient energy is employed to cause ionization of neutral particles (molecules of oxygen, nitrogen and the like, particulates, etc.) which then become a part of the region thereby increasing the charged particle density of the region. This effect can further be enhanced by providing artificial particles, e.g., electrons, ions, etc., directly into the region to be affected from a rocket, satellite, or the like to supplement the particles in the naturally-occurring plasma. These

artificial particles are also ionized by the transmitted electromagnetic radiation thereby increasing charged particle density of the resulting plasma in the region.

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. Sufficient power, e.g., 10^15 joules, can be applied so that the altered plasma can be trapped on the field line between mirror points and will oscillate in space for prolonged periods of time. By this embodiment, a plume of altered plasma can be established at selected locations for communication modification or other purposes.

In another embodiment, this invention is used to alter at least one selected region of plasma in the ionosphere to establish a defined layer of plasma having an increased charged particle density. Once this layer is established, and while maintaining the transmission of the main beam of circularly polarized electromagnetic radiation, the main beam is modulated and/or at least one second different, modulated electromagnetic radiation beam is transmitted from at least one separate source at a different frequency which will be absorbed in the plasma layer. The amplitude of the frequency of the main beam and/or the second beam or beams is modulated in resonance with at least one known oscillation mode in the selected region or regions to excite the known oscillation mode to propagate a known frequency wave or waves throughout the ionosphere.

BEST MODES FOR CARRYING OUT THE INVENTION

The earth's magnetic field is somewhat analogous to a dipole bar magnet. As such, the earth's magnetic field contains numerous divergent field or force lines, each line intersecting the earth's surface at points on opposite sides of the Equator. The field lines which intersect the earth's surface near the poles have apexes which lie at the furthest points in the earth's magnetosphere while those closest to the Equator have apexes which reach only the lower portion of the magnetosphere.

At various altitudes above the earth's surface, e.g., in both the ionosphere and the magnetosphere, plasma 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. It is well established that a charged particle in a magnetic field gyrates about field lines, the center of gyration at any instance being called the "guiding center" of the particle. 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. The frequencies at which the electrons and ions rotate about the field line are called gyro magnetic frequencies or cyclotron frequencies because they are identical with the expression for the angular frequencies of gyration of particles in a cyclotron. The cyclotron frequency of ions in a given magnetic field is less than that of electrons, in inverse proportion to their masses.

If the particles which form the plasma along the earth's field lines continued to move with a constant pitch angle, often designated "alpha", they would soon impact on the earth's surface. Pitch angle alpha is defined as the angle between the direction of the earth's magnetic field and the velocity (V) of the particle. However, in converging force fields, the pitch angle does change in such a way as to allow the particle to turn around and avoid impact. Consider a particle moving along a field line down toward the earth. It moves into a region of increasing magnetic field strength and therefore sine alpha increases. But sine alpha can only increase to 1.0, at which point the particle turns around and starts moving up along the field line, and alpha decreases. The point at which the particle turns around is called the mirror point, and there alpha equals ninety degrees. This process is repeated at the other end of the field line where the same magnetic field strength value B, namely Bm, exists. The particle again turns around and this is called the "conjugate point" of the original mirror point. The particle is therefore trapped and bounces between the two magnetic mirrors. The

particle can continue oscillating in space in this manner for long periods of time. The actual place where a particle will mirror can be calculated from the following:

sin² alpha0=B0/Bm

wherein:

alpha0=equatorial pitch angle of particle

B0=equatorial field strength on a particular field line

Bm=field strength at the mirror point

Recent discoveries have established that there are substantial regions of naturally trapped particles in space which are commonly called "trapped radiation belts". These belts occur at altitudes greater than about 500 km and accordingly lie in the magnetosphere and mostly above the ionosphere.

The ionosphere, while it may overlap some of the trapped-particle belts, is a region in which hydrostatic forces govern its particle distribution in the gravitational field. Particle motion within the ionosphere is governed by both hydrodynamic and electrodynamic forces. While there are few trapped particles in the ionosphere, nevertheless, plasma is present along field lines in the ionosphere. The charged particles which form this plasma move between collisions with other particles along similar helical paths around the field lines and although a particular particle may diffuse downward into the earth's lower atmosphere or lose energy and diverge from its original field line due to collisions with other particles, these charged particles are normally replaced by other available charged particles or by particles that are ionized by collision with said particle. The electron density (Ne) of the plasma will vary with the actual conditions and locations involved. Also, neutral particles, ions, and electrons are present in proximity to the field lines.

The production of enhanced ionization will also alter the distribution Or atomic and molecular constituents of the atmosphere, most notably through increased atomic nitrogen concentration. The upper atmosphere is normally rich in atomic oxygen (the dominant atmospheric constituent above 200 km

altitude), but atomic nitrogen is normally relatively rare. This can be expected to manifest itself in increased airglow, among other effects.

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.

[...]

Referring now to the drawings, the present invention provides a method and apparatus for altering at least one region of plasma which lies along a field line, particularly when it passes through the ionosphere and/or magnetosphere. FIG. 1 is a simplified illustration of the earth 10 and one of its dipole magnetic force or field lines 11. As will be understood, line 11 may be any one of the numerous naturally existing field lines and the actual geographical locations 13 and 14 of line 11 will be chosen based on a particular operation to be carried out. The actual locations at which field lines intersect the earth's surface is documented and is readily ascertainable by those skilled in the art.

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. Further, artificial particles, e.g., electrons, ions, etc., can be injected directly into region R from an earth-launched rocket or orbiting satellite carrying, for example, a payload of radioactive beta-decay material; alpha emitters; an electron accelerator; and/or ionized gases such as hydrogen; see U.S. Pat. No. 4,042,196. The altitude can be greater than about 50 km if desired, e.g., can be from

about 50 km to about 800 km, and, accordingly may lie in either the ionosphere or the magnetosphere or both. 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.

Antenna 15 is positioned as close as is practical to the location 14 where line 11 intersects the earth's surface. Antenna 15 may be of any known construction for high directionality, for example, a phased array, beam spread angle (symbol? circle with a line) type. See "The MST Radar at Poker Flat, Alaska", Radio Science, Vol. 15, No. 2, Mar.-Apr. 1980, pps. 213-223, which is incorporated herein by reference. Antenna 15 is coupled to transmitter 16 which generates a beam of high frequency electromagnetic radiation at a wide range of discrete frequencies, e.g., from about 20 to about 1800 kilohertz (kHz).

Transmitter 16 is powered by power generator means 17 which is preferably comprised of one or more large, commercial electrical generators. Some embodiments of the present invention require large amounts of power, e.g., up to 10⁹ to 10¹¹ watts, in continuous wave or pulsed power. Generation of the needed power is within the state of the art. Although the electrical generators necessary for the practice of the invention can be powered in any known manner, for example, by nuclear reactors, hydroelectric facilities, hydrocarbon fuels, and the like, this invention, because of its very large power requirement in certain applications, is particularly adapted for use with certain types of fuel sources which naturally occur at strategic geographical locations around the earth. For example, large reserves of hydrocarbons (oil and natural gas) exist in Alaska and Canada. In northern Alaska, particularly the North Slope region, large reserves are currently readily available. Alaska and northern Canada also are ideally located geographically as to magnetic latitudes. Alaska provides easy access to magnetic field lines that are especially suited to the practice of this invention, since many field lines which extend to desirable altitudes for this invention intersect the earth in Alaska. Thus, in Alaska, there is a unique combination of large, accessible fuel sources at desirable field line intersections. Further, a particularly desirable fuel source for the generation of very large amounts of

electricity is present in Alaska in abundance, this source being natural gas. The presence of very large amounts of clean-burning natural gas in Alaskan latitudes, particularly on the North Slope, and the availability of magnetohydrodynamic (MHD), gas turbine, fuel cell, electrogasdynamic (EGD) electric generators which operate very efficiently with natural gas provide an ideal power source for the unprecedented power requirements of certain of the applications of this invention. For a more detailed discussion Or the various means for generating electricity from hydrocarbon fuels, see "Electrical Aspects of Combustion", Lawton and Weinberg. Clarendon Press, 1969. For example, it is possible to generate the electricity directly at the high frequency needed to drive the antenna system. To do this, typically the velocity of flow of the combustion gases (v), past magnetic field perturbation of dimension d (in the case of MHD), follow the rule:

v=df

where f is the frequency at which electricity is generated. Thus, if $v= 1.78 \times 10^{6}$ cm/sec and d=l cm then electricity would be generated at a frequency of 178 mHz.

[...]

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.

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. The exact period of time will vary widely and be determined by gravitational forces and a combination of radiative and diffusive loss terms. In the previous detailed example, the calculations were based on forming a plume by producing O+ energies of 2 ev/particle. About 10 ev per particle would be required to expand plasma 12 to apex point C (FIG. I). There at least some of the particles of plasma 12 will be trapped and will oscillate between mirror points along field line 11. This oscillation will then allow additional heating of the trapped plasma 12 by stochastic heating which is associated with trapped and oscillating particles. See "A New Mechanism for Accelerating Electrons in the Outer Ionosphere" by R. A. Helliwell and T. F. Bell, Journal of Geophysical Research' Vol. 65, No. 6, June, 1960. This is preferably carried out at an altitude of at least 500 km.

The plasma of the typical example might be employed to modify or disrupt micro-wave transmissions of satellites. If less than total black-out of transmission is desired (e.g., scrambling by phase shifting digital signals), the density of the plasma (Ne) need only be at least about 10^6 per cubic centimeter for a plasma originating at an altitude of from about 250 to about 400 km and accordingly less energy (i.e., electromagnetic radiation), e.g., 10^8 joules need be provided. Likewise, if the density Ne is on the order of 10^8, a properly positioned plume will provide a reflecting surface for VHF waves and can be used to enhance, interfere with, or otherwise modify communication transmissions.

It can be seen from the foregoing that by appropriate application of various aspects of this invention at strategic locations and with adequate power sources, a means and method is provided to cause interference with or even total disruption of communications over a very large portion of the earth. This invention could be employed to disrupt not only land based communications, both civilian and military, but also airborne communications and sea communications (both surface and subsurface). This would have significant military implications, particularly as a barrier to or confusing factor for hostile missiles or airplanes.

The belt or belts of enhanced ionization produced by the method and apparatus of this invention, particularly if set up over Northern Alaska and Canada, could be employed as an early warning device, as well as a communications disruption medium. Further, the simple ability to produce such a situation in a practical time period can by itself be a deterring force to hostile action. The ideal combination of suitable field lines intersecting the earth's surface at the point where substantial fuel sources are available for generation of very large quantities of electromagnetic power, such as the North Slope of Alaska, provides the wherewithal to accomplish the foregoing in a practical time period, e.g., strategic requirements could necessitate achieving the desired altered regions in time periods of two minutes or less and this is achievable with this invention, especially when the combination of natural gas and magnetohydrodynamic, gas turbine, fuel cell and/or EGD electric generators are employed at the point where the useful field lines intersect the earth's surface.

One feature of this invention which satisfies a basic requirement of a weapon system, i.e., continuous checking of operability, is that small amounts of power can be generated for operability checking purposes. Further, in the exploitation of this invention, since the main electromagnetic beam which generates the enhanced ionized belt of this invention can be modulated itself and/or one or more additional electromagnetic radiation waves can be impinged on the ionized region formed by this invention as will be described in greater detail herein after with respect to FIG. 4, a substantial amount of randomly modulated signals of very large power magnitude can be generated in a highly nonlinear mode. This can cause confusion of or interference with or even complete disruption of guidance systems employed by even the most sophisticated of airplanes and missiles. The ability to employ and transmit over very wide areas

of the earth a plurality of electromagnetic waves of varying frequencies and to change same at will in a random manner, provides a unique ability to interfere with all modes of communications, land, sea, and/or air, at the same time. Because of the unique juxtaposition of usable fuel source at the point where desirable field lines intersect the earth's surface, such wide ranging and complete communication interference can be achieved in a reasonably short period of time. Because of the mirroring phenomenon discussed herein above, it can also be prolonged for substantial time periods so that it would not be a mere transient effect that could simply be waited out by an opposing force. 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.

Where the prior art approaches yielded merely transitory effects, the unique combination of fuel and desirable field lines at the point where the fuel occurs allows; the establishment of, compared to prior art approaches, precisely controlled and long-lasting effects which cannot, practically speaking, simply be waited out. Further, by knowing the frequencies of the various electromagnetic beams employed in the practice of this invention, it is possible not only to interfere with third party communications but to take advantage of one or more such beams to carry out a communications network even though the rest of the world's communications are disrupted. Put another way, what is used to disrupt another's communications can be employed by one knowledgeable of this invention as a communications network at the same time.

In addition, once one's own communication network is established, the far-reaching extent of the effects of this invention could be employed to pick up communication signals of other(s) for intelligence purposes. Thus, it can be seen that the disrupting effects achievable by this invention can be employed to benefit by the party who is practicing this invention since knowledge of the various electromagnetic waves being employed and how they will vary in frequency and magnitude can be used to an advantage for positive communication and eavesdropping purposes at the same time. However, this invention is not limited to locations where the fuel source naturally exists or where desirable field lines naturally intersect the earth's surface. For example, fuel, particularly hydrocarbon fuel, can be transported by pipeline and the like to the location where the invention is to be practiced.

[...]

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.

Also as alluded to earlier, molecular modifications of the atmosphere can take place so that positive environmental effects can be achieved. Besides actually changing the molecular composition of an atmospheric region, a particular molecule or molecules can be chosen for increased presence. For example, ozone, nitrogen, etc. concentrations in the atmosphere could be artificially increased. Similarly, environmental enhancement could be achieved by causing the breakup of various chemical entities such as carbon dioxide, carbon monoxide, nitrous oxides, and the like.

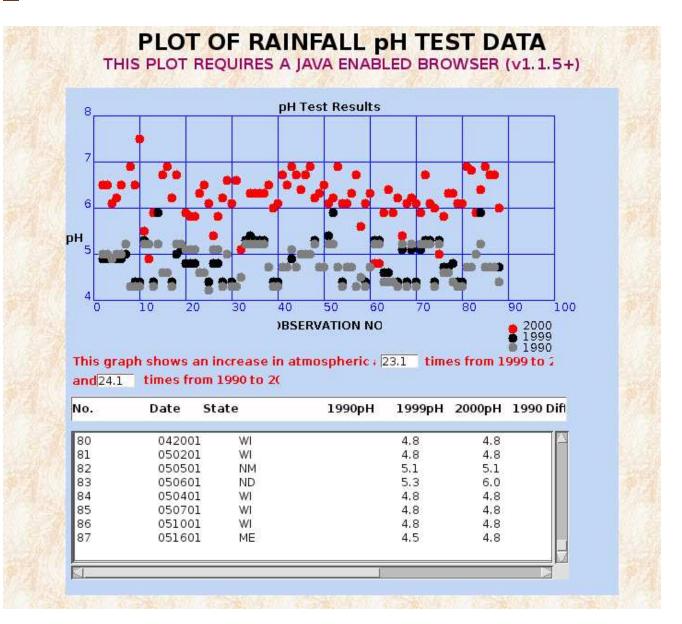
Transportation of entities can also be realized when advantage is taken of the drag effects caused by regions of the atmosphere moving up along diverging field lines. Small micron sized particles can be then transported. and, under certain circumstances and with the availability of sufficient energy, larger particles or objects could be similarly affected. Particles with desired characteristics such as tackiness, reflectivity, absorptivity, etc., can be transported for specific purposes or effects. For example, a plume of tacky particles could be established to increase the drag on a missile or satellite passing there through. Even plumes of plasma having substantially less charged particle density than described above will produce drag effects on missiles which will affect a lightweight (dummy) missile in a manner substantially different than a heavy (live) missile and this affect can be used to distinguish between the two types of missiles. A moving plume could also serve as a means for supplying a space station or for focusing vast amount of sunlight on selected portions of the earth.

Surveys of global scope could also be realized because the earth's natural magnetic field could be significantly altered in a controlled manner by plasma beta effects resulting in, for example, improved magnetotelluric surveys. Electromagnetic pulse defenses are also possible. The earth's magnetic field could be decreased or 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.

Further, irregularities can be created in the ionosphere which will interfere with the normal operation of various types of radar, e.g., synthetic aperture radar. The present invention can also be used to create artificial belts of trapped particles which in turn can be studied to determine the stability of such parties. 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. Thus it can be seen that the ramifications are numerous, far-reaching, and exceedingly varied in usefulness.

PLOT OF RAINFALL pH TEST DATA

carnicominstitute.org/plot-of-rainfall-ph-test-data/



PLOT OF RAINFALL pH TEST DATA THIS PLOT REQUIRES A JAVA ENABLED BROWSER (v1.1.5+)

Click Here for Java Applet

<u>pH Test Alert</u> <u>ph Test Results</u> <u>20 Times</u>

ABSORPTION STUDY

carnicominstitute.org/absorption-study/



ABSORPTION STUDY January 09 2001 Clifford E Carnicom

The following table depicts an estimate of the amount of electromagnetic energy absorbed by a particle of barium at various sizes and for varying wavelengths. The results for other metals should be similiar to those of barium. The basis for this work is arrived at through a use of the exponential attentuation law in combination with the definition of the coefficient of absorption. The derived result expressing the energy absorption of a metallic particle is a function of particle size, conductivity, wavelength and the permeability of the vacuum constant.

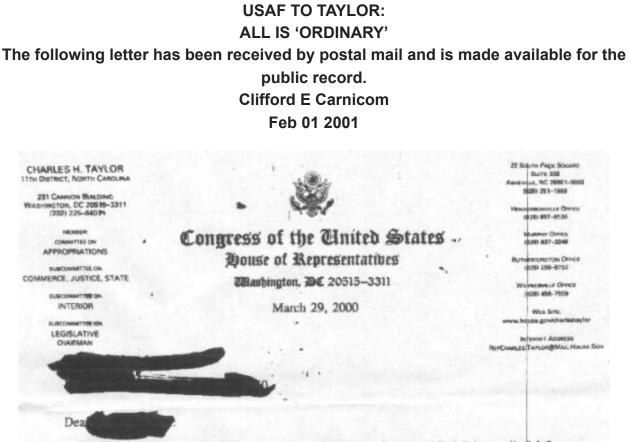
ELECTROMAGNETIC ENERGY ABSORBED Particle Size in Microns

	0.2	1	10
Wavelength			
Radio (10^8)	0.2%	1%	11%

Microwaves (10^11)	7%	30%	97%
Visible (10^14)	99%	~100%	~100%
X-Rays (10^18)	~100%	~100%	~100%

USAF TO TAYLOR: ALL IS 'ORDINARY'

carnicominstitute.org/usaf-to-taylor-all-is-ordinary/



Thank you for contacting me to share information about so-called "chemtrails," left in the skies by passing aircraft. I always appreciate hearing from constituents, and greatly benefit from knowing their views. I would also like to apologize for the delay in responding to you. Due to the tremendous volume of mail I have recently received, I have been unable to remain as diligent in answering correspondence as I would wish.

I am informed by the Air Force that these "chemtrails" are nothing more than ordinary contrails, left by aircraft flying at 25,000 to 40,000 feet, formed by engine exhaust condensing water vapor into a visible cloud. According to the Air Force, these contrails are safe, contrary to the information you may have received via the Internet: they do not contain ethylene dibromide (EDB), and pose no environmental hazard or risk to human health. Please be assured, however, that I will continue to monitor this issue, and appreciate your bringing it to my attention.

Again, thank you for contacting me regarding this issue. If I can be of further assistance in this or any other matter, please do not hesitate to contact me. Additionally, if you would like to receive my weekly email update, Capitol Connection, just email **RepCharles.Taylor@mail.house.gov** and I will be glad to send it to you. With warmest regards, I am,

Sincerel

Charles H. Taylor Member of Congress

THE NUREMBERG CODE

carnicominstitute.org/the-nuremberg-code/



THE NUREMBERG CODE The following is an excerpt from theNuremberg Code reprinted by the Office of Human Subjects Research – National Institutes of Health <u>http://ohsr.od.nih.gov/nuremberg.php3</u> Posted by Clifford E Carnicom Feb 01 2001

> Directives for Human Experimentation NUREMBERG CODE

"The voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, over-reaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject there should be made known to him the nature, duration, and purpose of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonable to be expected; and the effects upon his health or person which may possibly come from his participation in the experiment." Reprinted from Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law No. 10, Vol. 2, pp. 181-182.. Washington, D.C.: U.S. Government Printing Office, 1949.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY LAW

Carnicominstitute.org/united-states-environmental-protection-agency-law/



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY LAW Posted By Clifford E Carnicom Feb 01 2001

The mission of the U.S. Environmental Protection Agency is to protect human health and to safeguard the natural environment–air, water, and land–upon which life depends.

UNITED STATES CODE : TITLE 42 : CHAPTER 85

Sec. 7571. Establishment of standards

(A) The Administrator shall, from time to time, issue proposed emission standards applicable to the emission of any air pollutant from any class or classes of aircraft engines which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare. (3) The Administrator shall hold public hearings with respect to such proposed standards. Such hearings shall, to

the extent practicable, be held in air quality control regions which are most seriously affected by aircraft emissions. Within 90 days after the issuance of such proposed regulations, he shall issue such regulations with such modifications as he deems appropriate. Such regulations may be revised from time to time.

Sec. 7415. International air pollution

(a) Endangerment of public health or welfare in foreign countries from pollution emitted in United States

Whenever the Administrator, upon receipt of reports, surveys or studies from any duly constituted international agency has reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country or whenever the Secretary of State requests him to do so with respect to such pollution which the Secretary of State alleges is of such a nature, the Administrator shall give formal notification thereof to the Governor of the State in which such emissions originate.

(b) Prevention or elimination of endangerment

The notice of the Administrator shall be deemed to be a finding under section 7410(a)(2)(H) (ii) of this title which

requires a plan revision with respect to so much of the applicable implementation plan as is inadequate to prevent or eliminate the endangerment referred to in subsection (a) of this section. Any foreign country so affected by such emission of pollutant or pollutants shall be invited to appear at any public hearing associated with any revision of the appropriate portion of the applicable implementation plan.

Sec. 7427. Public notification

(a) Warning signs; television, radio, or press notices or information

Each State plan shall contain measures which will be effective to notify the public during any calendar

[1] on a regular basis of instances or areas in which any national primary ambient air quality standard is exceeded or was exceeded during any portion of the preceding calendar year to advise the public of the health hazards associated with such pollution, and to enhance public awareness of the measures which can be taken to prevent such standards from being exceeded and the ways in which the public can participate in regulatory and other efforts to improve air quality. Such measures may include the posting of warning signs on interstate highway access points to metropolitan areas or television, radio, or press notices or information.

Sec. 7491. Visibility protection for Federal class I areas

(a) Impairment of visibility; list of areas; study and report

(1) Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing,

impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.

(2) Not later than six months after August 7, 1977, the Secretary of the Interior in consultation with other Federal

land managers shall review all mandatory class I Federal areas and identify those where visibility is an important

value of the area. From time to time the Secretary of the Interior may revise such identifications. Not later than

one year after August 7, 1977, the Administrator shall, after consultation with the Secretary of the Interior,

promulgate a list of mandatory class I Federal areas in which he determines visibility is an important value.

UNITED STATES EPA REGION 4 ALSO 'UNAWARE'

carnicominstitute.org/united-states-epa-region-4-also-unaware/

UNITED STATES EPA REGION 4 ALSO 'UNAWARE' The following letter has been received by postal mail and is made available for the public record. Clifford E Carnicom Feb 01 2001



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

SEP 1 5 2000

The Honorable Jesse Helms United States Senator P.O. Box 2944 Hickory, North Carolina 28603

Dear Senator Helms:

Thank you for your letter dated August 22, 2000, on behalf of Mr. addressing his concerns about aerial applications of "something" over Asheville, North Carolina, Knoxville, Tennessee, Augusta, Georgia, the states of Florida, and Washington. We have had other citizen complaints about the high altitude aerial spraying of chemical, biological, and other toxic materials over various sections of the United States.

Although we understand Mr. **Example concern** in this matter, the U. S. Environmental Protection Agency (EPA) is not aware of any program to disperse any toxic materials on U.S. population centers or other parts of the country from jet or any other type of aircraft. What we can do is briefly explain how jet engine exhaust occasionally forms contrails, and what EPA is doing to reduce the emissions from these aircraft engines as a byproduct of fuel combustion.

Jet aircraft engines emit tiny particles that serve as condensation nuclei. High-altitude water vapor collects on these particles, crystallizes, in turn creating streaks of frozen water vapor, otherwise known as contrails, from airplanes operating at high altitudes. Some contrails join with other contrails and expand into huge, natural-looking clouds of cirrus characteristics that can cover large areas of the sky. A 1999 report issued by the Intergovernmental Panel entitled, *Aviation and the Global Atmosphere*, discusses contrail formation and its effects in more detail. A copy of this report (ISBN number 0 521 66300 8) may be ordered through the Cambridge University Press website at www.cup.org. Further work is required to reduce scientific and other uncertainties of aviation impacts, and EPA and the Federal Aviation Administration fully support continued research to address these issues.

In regard to air quality impacts, although jet aircraft contribute much less air pollution than that from motor vehicles, their overall emissions are increasing every year as air travel becomes more popular. In addition, jet aircraft can contribute significantly to ground-level ambient air pollution in the immediate vicinity of an airport, especially emissions of oxides of nitrogen (NOx) and hydrocarbons (HCs) which contribute to the formation of ozone. Additional, detailed information on aircraft emissions can be found in a recently published EPA Office of Mobile Sources (OMS) report, *Evaluation of Air Pollutant Emissions from Subsonic Commercial Jet Aircraft*. April 1999. This report is available at the OMS Aviation Emissions web site (www.epa.gov/oms/aviation.htm). It provides an estimation of the contribution of aircraft to air quality emissions in 10 urban areas.

> Internet Address (URL) + http://www.spa.gov Recycled/Recyclable + Printed with Vegetable Oil Based Inte on Recycled Paper (Minimum 30% Postconsumer)

We appreciate your interest in protecting our environment, and hope that this letter addresses your concerns. If I may be of further assistance, please feel free to contact me or the Region 4 Office of External Affairs at (404) 562-8327.

Sincerely,

John H. Hankinson, Jr. Regional Administrator

UNITED NATIONS TREATY Environmental Modification Restrictions 1976

carnicominstitute.org/united-nations-treaty-environmental-modification-restrictions-1976/

UNITED NATIONS TREATY Environmental Modification Restrictions 1976

Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques

10 December 1976

The States Parties to this Convention,

Guided by the interest of consolidating pance, and wishing to contribute to the cause of halting the arms race, and of bringing about general and complete disarmament under strict and effective international control, and of saving mankind from the danger of using new means of warfare.

Determined to continue negotiations with a view to achieving effective progress rowards further measures in the field of disarmament,

Recognizing that scientific and technical advances may open new possibilities with respect to modification of the environment,

Recalling the Dudmention of the United Mations Conference on the Human Environment, adopted at Stockholm on 1 June 1972,

Realizing that the use of environmental modification techniques for proceedial purposes could improve the interrelationship of man and nature, and contribute to the preservation and improvement of the environment for the benefit of present and lature encertations.

Recognizing, however, that military or any other hostile of such tochniques could have effects extremely harmful to human welfam,

Desiring to prohibit effoctively military or any other housile use of environmental modification techniques in order to elimisure the dangers to munkind from such use, and affirming their willingness to work towards the achievement of this objective,

Desiring also in contribute to the strengthening of trust among nations and to the further improvement of the international situation in accordance with the purposes and principler of the Charter of the United Nations, have agreed as follows:

Article 1

 Each State Party to this Convention undertakes not to engage in military or any other heatile use of environmental modification rechniques having widespread, long-fasting or sewer effects as the means of destruction, damage or injury to any other State Party.

Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the previsions of paragraph 1 of this article.

Article 17

As used in article I, the term "onvironmental modification techniques" refers to any technique for changing—through the deliberate manipolation of nameal processes—the dynamics, composition or structure of the Earth, including its hosts, lithusphere, hydrosphere and stmosphere, or of outer space.

Actucle 111

 The provisions of this Convention shall not hinder the use of environmental modification techniques for peaceful purposes and shall be without prejudice to the generally recognized principles and applicable rules of International law concerning such use.

2. The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fallest possible exchange of scientific and technological information on the use of environmental modification techniques for peaceful purposes. Sums Parties in a position to do so shall contribute, alone or together with other States or international organizations, to international economic and scientific en-operation in the preservation, improvement and peaceful utilization of the environment, with due considerations for the needs of the developing arms of the work].

Article IV

Each State Party to this Convention undertakes to take any measures is considers nocessary in accordance with its constitutional processes to prohibit and prevent any activity in violation of the previous of the Convention anywhere under its jurisdiction or control.

Article V

 The States Parties to this Convention undertake to consult case another and to co-operate in solving any problems which may arise in relation to the objectives of, or in the application of the provisions of, the Convention. Consultation and cooperation pursuant to this article may also be undertaken through appropriate international procedures within the framework of the United Nations and in accordance with its Charter. These international procedures may include the services of appropriate international organizations, as well as of a Consultative Committee of Experts as provided for in paragraph 2 of this article.

2. For the purposes set forth in paragraph 1 of this article, the Depositary shall, within one month of the receipt of a request from any Searc Party to this Convention, converte a Consultative Committee of Experts. Any Searc Party may appoint an expert in the Caramitree whose functions and nake of procedure are set out in the annex, which constitutes an integral part of this Convention. The Committee shall trainmit to the Depositary a nummary of its findings of fact, incorporating all views and information proceedings. The Depositary shall distribute the automary to all States Parties.

3. Any State Party to this Convention which has reason to helieve that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may ledge a complaint with the Security Council of the United Nations. Such a complaint should include all selesant information as well as all possible evidence supporting its validity.

4. Each State Party to this Convention undertaken to cooperate in carrying out any investigation which the Secarity Connell may initiate, in accordance with the provisions of the Charter of the United Nations, on the basis of the complaint received by the Council. The Security Council shall inform the States Parties of the results of the investigation. 5. Each State Party to this Convention undertaken to provide or support assistance, in accordance with the provisions of the Charter of the United Nations, to any State Party which no requests, if the Security Council decides that such Party has been harmed or is likely to be harmed as a result of violation of the Convention.

Avoide VI

1. Any State Party to this Convention may propose mendments to the Convention. The rest of any proposed amendment aball be submitted to the Depositary, who shall promptly circulate it to all States Parties,

2. An amondment shall enter into lorce for all States Parties to this Convention which have accepted it, upon the deposit with the Depositary of instruments of acceptance by a majority of Status Parties. Thereafter it shall enter into force for my remaining State Party on the date of deposit of its instrument of acceptance.

Anicie VII

This Conversion shall be of unlimited duration.

Article VIII

1. Five years after the entry into force of this Convention, a conference of the Status Parties to the Convention shall be convened by the Depositury at Geneva, Switzerland. The conference shall review the operation of the Convention with a view to enturing that its purposes and provisions are being realized, and shall in purticular examine the effectiveness of the provisions of paragraph 1 of article 1 in eliminating the dangers of military or any other hostile use of environmental modification techniques.

2. At intervals of not less than five years thereafter, a majority of the States Parties to this Convention may obtain, by submitting a proposal to this effect to the Depositary, the convening of a conference with the same objectives.

3. If so conference has been convened pursuant to paragraph 2 of this article within ten years following the conclusion of a previous conference, the Deposicary shall solicit the views of all States Parties to this Convention concerning the convening, of such a conference. If one third or sen of the States Parties, whichever number is less, respond affirmatively, the Depusitory shall take immediate steps to convene the conference.

Article 1X

1. This Gooverstion shall be open to all States for signature. Any State which does not sign the Convention before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Convention shall be subject to ratification by tignatory States. Instruments of ratification or accession shall be deposited with the Secretary-General of the United Nation

3. This Convention shall enter into force upon the deposit of instruments of ratifications by twenty Governments in accordnex with paragraph 2 of this article,

4. For those States whose instruments of ratification or accession are deposited after the entry into force of this Convention, it shall enter into force on the date of the depasit of their instruments of ratification or accession.

3. The Depositary shall promptly inform all signatory and accoding States of the date of each signature, the date of deposic of each instrument of ratification or accession and the date of the entry into force of this Consention and of any amendments thereto, as well as of the receipt of other notices.

 This Convention shall be registered by the Depositary in accordance with Article 102 of the Chaster of the United Nations.

Article X

This Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall he depended with the Secretary-General of the United Nations, who shall send duly certified copies thereof to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the andersigned, being duly uthorized thereto, have signed this Convention.

DONE at on the ... day of

ALX C

Annex so the Convention Consultative Committee of Experts

1. The Consultative Committee of Experts shall undertake so make appropriate findings of fact and provide expert views relevant to any problem raised pursuant to paragraph 1 of article V of this Convention by the Scate Party requesting the convening of the Committee.

2. The work of the Consultative Committee of Expens shall he organized in such a way as to permit it to perform the functions set forth in paragraph 1 of this annex. The Committee shall decide procedural questions relative to the organization of its work, where possible by comensus, but otherwise by a majority of those present and voting. There shall be no voting on matters of substance.

3. The Depository or his representative shall serve as the Chairman of the Committee.

4. Each expert may be assisted at meetings by one or more achtiners.

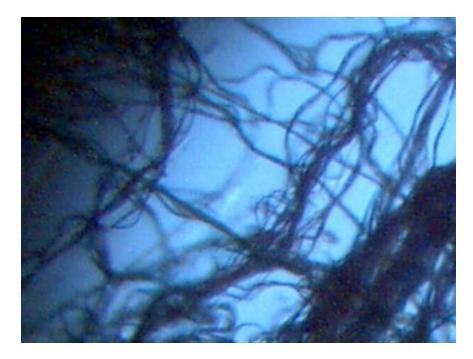
5. Each expert shall have the right, through the Chairman, to request from Status, and from international organiza-tions, tach information and association as the expert comiders desirable for the accomplishment of the Committee's work.

IDENTICAL FIBER SAMPLES RECEIVED

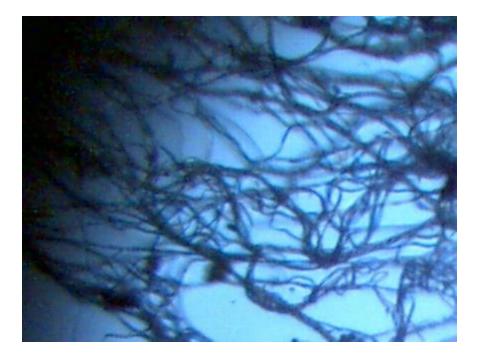
carnicominstitute.org/identical-fiber-samples-received/

IDENTICAL FIBER SAMPLES RECEIVED Posted by Clifford E Carnicom Feb 04 2001

Two additional samples of fibrous material have been received within the last few months. These samples are identical in both appearance and characteristic to those described <u>earlier</u>. Four such samples have now been reviewed under the microscope. Material by all appearances identical to that presented herein has been sent by certified mail to the U.S. Environmental Protection Agency for identification. These earlier materials were found to contain significant biological components as described within <u>previously</u>. To date, this agency refuses to identify this material and to disclose the results of such testing to the American public. Carol Todd Whitman, the recently appointed administrator of the Environmental Protection Agency, is now obligated to fulfill this duty to the citizens of this country.



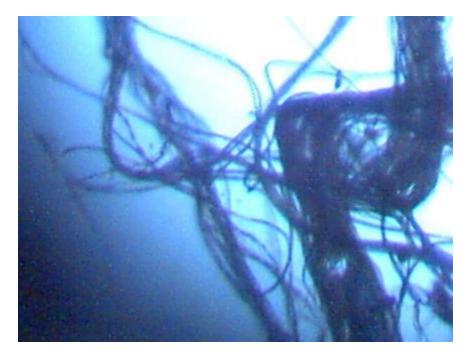
Sample sent on Nov 03 2000 from California. Magnification approx. 480x.



Sample sent on Nov 03 2000 from California. Magnification approx. 480x.



Sample sent from Joseph, Oregon on Oct 02 2000. Magnification Approx. 480x.



Sample sent from Joseph, Oregon on Oct 02 2000. Magnification Approx. 480x.

Statement received which accompanied the sample from Joseph, Oregon:

Clifford:

Enclosed is the sample i collected on 9/17/00. Additional information is on the outside of the container. 'Density' of the material in the sky was approx. one every 300 meters. Last November they were every 10 meters.

Contrails are common over the Wallowa Mountains.

I did not touch the sample, however i did get flu like symptoms five days later which lasted one day. Don't know if it was connected or just a bad food...

When first noticed, the sample was approx. four inches long and floating in the air. When collected on the end of a clean paint scraper, it was extremely sticky and ended up in the condition found in the bottle.

I would expect to find more samples in the future.

I volunteer with a wildlife biologist who does not know what they are either.

ELECTROSTATIC PRECIPITATION

carnicominstitute.org/electrostatic-precipitation/



ELECTROSTATIC PRECIPITATION

It is recommended that research into the field of electrostatic precipitation be promptly commenced by citizens, professionals and independent researchers across the country. This activity, in addition to the pursuit of direct high resolution filtering of the atmosphere, may be a beneficial course of action to identify the abundant particulate matter that has recently been disclosed. This statement is provided to further accelerate the progress of research currently underway within the country on the aerosol operations that continue to be conducted without citizen informed consent.

Clifford E Carnicom Feb 05 2001

TELEPHONE TAP APPARENT

carnicominstitute.org/telephone-tap-apparent/



TELEPHONE TAP INDICATED(FORMER TITLE) APPARENT(CURRENT TITLE) Clifford E Carnicom Feb 06 2001 Latest Edit April 08 2001

There are now indications that the telephone line to my residence may now be tapped, and that a covert means to monitor conversation may have been established. These indications have originated from abrupt and erratic telephone service on Feb 03, Feb 04 and Feb 05 2001 to my residence, which included symptoms of repeated termination of conversation in mid-progress, failed connections, emergence of dial tones midstream and various clicks and anomalous sounds within the transmissions. These patterns were also reported by third parties, as well as having been witnessed from my residence.

Since that time, the telephone has generally restored itself to an apparent norm, with the exception that conversations are now discretely, repeatedly and intermittently interrupted with periodic clicks and momentary pauses of silence within the telephone transmissions.

These facts are reported strictly from an observational point of view, in an effort to present an honest record of those actions that may have been taken. If information to the contrary presents itself, or if a change in these circumstances occur, I will promptly report that information with equal earnestness.

Sincerely,

Clifford E Carnicom Feb 06 2001

The statement above remains valid and unchanged as of Feb 14 2001. Clifford E Carnicom

The statement above remains valid and unchanged as of Feb 27 2001. Clifford E Carnicom

The statement above remains valid and unchanged as of Mar 08 2001. Clifford E Carnicom

The statement above remains valid and unchanged as of Apr 07 2001. Clifford E Carnicom

The statement above remains valid and unchanged as of May 04 2001. Also intermittent "dead air" phone calls received. Clifford E Carnicom

IONIZATION APPARENT

carnicominstitute.org/ionization-apparent/



IONIZATION APPARENT Feb 20 2001 Edited Mar 01 2001 Clifford E Carnicom

The question of whether or not visible light is sufficient to ionize the presumed metallic particulate material recently evidenced by the photographs and video of Jan 03 2001 is now answerable. Primary candidates for the testing of the particulate matter has for some time now been those elements within Groups I and II of the periodic table, i.e., Li, Na, K, Rb, Cs, Be, Mg, Ca, Sr and Ba. Of this group, barium and magnesium are currently receiving the most attention within the research.

A physical quantity entitled the "work function" of a metal is crucial to the determination of the level of energy that is required for photo-ionization to take place. The work function is defined as follows:

"A quantity that determines the extent to which thermionic or photoelectric emission will occur according to the Richardson equation or Einstein's photoelectric equation. It is sometimes expressed as a potential difference in volts and sometimes as the energy required to remove an electron in electronvolts or joules."

Oxford Dictionary of Science, 1999.

The work function is essentially the work that is required to separate an electron from the metal surface. The following table lists the magnitude of the work function for the elements above (as well as for aluminum):

Element	Work Function (eV)
Li	2.9
Na	2.8
к	2.3
Rb	2.2
Cs	2.1
Be	5.0
Mg	3.7
Са	2.9
Sr	2.6
Ва	2.7
AI	4.28

From Theoretical Physics by Joos 1958 :

"In order that there by ionization by light – photo-ionization- the incident light quantum hv must be at least equal to the work of ionization. Calling the latter eVi, we have

hv >= eVi

If we characterize the light by its frequency instead of by its wavelength, insertion of the numerical values yields the easily-remembered relationship between wave-length and equivalent electron energy

wavelength (in nanometers) x Vi (electron energy in volts) = 1238"

or alternatively,

wavelength (nm) = 1238 / Vi (eV)

Using the values from the table above, for barium we find:

wavelength = 1238 / 2.7eV = 459nm, which is in the visible portion of the spectrum.

Similiarly for magnesium, we find:

wavelength = 1238 / 3.7eV = 335nm, which is in the midrange-ultraviolet portion of the spectrum.

Note that for aluminum,

wavelength – 1238 /4.28eV = 289nm, which is in the shortwave-ultraviolet portion of the spectrum.

The results of this study indicate that the energy available within visible light is sufficient to produce photo-ionization of barium particulate matter, and that midrangeultraviolet light is sufficient to produce photo-ionization of particulates of magnesium if also considered. They also indicate that the majority of the elements that are candidates for consideration are subject to these same conclusions. These findings are significant in interpreting and explaining the apparent electrically charged behavior of the materials and the emission of photon energy as it has been recorded.

Clifford E Carnicom Feb 20 2001

ADDITIONAL RESEARCH:Readers may also wish to research the following link:

THE ULTRAVIOLET SPECTRUM

From which it can be learned that

"Ultraviolet is closest to and just shorter than visible light in wavelength. Ultraviolet can be subdivided according to wavelength into (from lowest to highest): longwave ultraviolet (UVA or near ultraviolet), middlewave ultraviolet (UVB), shortwave ultraviolet (UVC), and extreme ultraviolet. Longwave ultraviolet is part of sunlight. It is the lowest-frequency ultraviolet, and thus the nearest to visible light. Longwave ultraviolet passes easily through most transparent types of glass and plastic. Longwave ultraviolet lights are available, and they are the cheapest and longest-lasting ultraviolet lights. They cause some fluorescent minerals (perhaps 15%) to exhibit fluorescence.

Midwave ultraviolet is also part of sunlight. Longer wavelengths of midwave ultraviolet cause suntans, while shorter wavelengths of midwave cause sunburn. Midwave, especially shorter wavelengths, is partially stopped by clear glass. Since midwave ultraviolet is passed by shortwave ultraviolet filters, and since midwave tubes have recently become widely available, some collectors are starting to use midwave to study mineral fluorescence.

Shortwave ultraviolet is emitted by the sun, but it is stopped in the upper atmosphere of the earth by the ozone layer. "

Also noting that the range is divided as follows:

Longwave UV : 350 – 380nm Midrange UV : 300 – 350nm Shortwave UV: 250 – 300nm Extreme UV: < 250nm

Combined with the above information, we can conclude that barium is easily subject to photo-ionization, magnesium may be partially ionizable, and aluminum is not subject to photo-ionization due to the filtering at the necessary wavelength by the ozone layer.

Edited Mar 01 2001 Clifford E Carnicom

IONIZATION-"CLOUDS" RELATIONSHIP

carnicominstitute.org/ionization-clouds-relationship/



IONIZATION-"CLOUDS" RELATIONSHIP

The role and importance of photo-ionization within the aerosol operations is becoming increasingly evident. In addition to the reasoning process outlined earlier within <u>A</u> <u>Case For Testing</u>, the formation of so-called "clouds" can be directly related to the introduction of easily ionized materials within the atmosphere.

From Chemistry, by Joseph Mascetta 1996, it is stated within the discussion on cloud chambers, that:

"One of the most useful instruments for detecting and measuring radiation is the Wilson cloud chamber. Its operation depends on the well known fact that moisture tends to concentrate around ions (the probable explanation for some formation of clouds in the sky)."

Numerous other references related to cloud chamber theory complement the above statement, and they also describe the clear relationship between the introduction of an ionizable material and the condensation process.

This finding is in accord with all previous analyses which substantiate the case of radical alterations in the earth's atmosphere, as well as with the recent findings that demonstrate the abundance of electrically charged particulate matter in direct association with the aerosol operations.

Clifford E Carnicom Feb 24 2001

ELECTROSTATIC PRECIPITATION METHOD ESTABLISHED

carnicominstitute.org/electrostatic-precipitation-method-established/

ELECTROSTATIC PRECIPITATION METHOD ESTABLISHED Clifford E Carnicom Feb 25 2001

It has been previously recommended that electrostatic precipitation be considered as an investigative tool to collect, analyze and identify the particulate matter which has been shown to exist at extraordinary levels in our atmosphere in direct association with the aerosol operations conducted without citizen informed consent. Electrostatic precipitation is a method of removing solid and liquid particles from suspension in a gas. The gas, in this case the atmosphere, is exposed to an electric field so that the particles are attracted to and deposited on a suitably placed electrode or surface. Electrostatic precipitation is widely used to remove dust and other pollutants from waste gases and from the air. [Reference Oxford Dictionary of Science, 1999]

A method to conduct electrostatic precipitation of atmospheric samples has been developed and constructed. The history of electrostatic precipitation as a filtering technique for particulate data extends back to at least 1906, with the work of Frederick Cottrell and the development of industrial electrostatic precipitators. The method developed for this current purpose consists of the following components :

- 1. A Van de Graaf generator, rated at 200,000 volts.
- 2. An electric ventilator fan
- 3. 3 inch duct hose with hose clamps on each end

4. A 3 inch clear plastic container with the lid and the bottom removed to allow air flow.

5. Porous filtering material covering one end of the plastic container.

6. An electrode inserted into the plastic container.

7. Glass microscope slides inserted into the container, to serve as particulate collection devices.

Analysis of the material collected is conducted via microscopy. The method developed has been tested upon smoke transferred into a container, and has proven itself to work exceptionally well. At the bottom of this page is a photograph of collection of the smoke particulate matter on a cotton swab obtained from the inside of a glass container used for that test.

The general operation of the precipitator is as follows: Air flow enters the incoming vent of the electric ventilation fan. This air is channeled approximately 3 feet linear distance through duct hose to a 3 inch diameter clear plastic container. The bottom of the container is removed for air flow purposes, and the duct hose is connected and sealed to the container via duct tape. Microscope glass slides are inserted into the container and held in place with transparent tape. The lid of this same plastic container on the opposing end (lee side) is removed, and this opening is covered with porous filter material to both restrict and permit air flow through the container. An electrode consisting of fine wire 2 to 3 inches long is then inserted through the side of the collection container, and is held in place with modeling clay. A wire to conduct the electricity runs from the top sphere of the Van de Graaf generator to the electrode inserted into the plastic container. The electric fan and the Van de Graaf generator are then started, and allowed to run for a period of time. Approximately 1 hour has been used for the initial atmospheric sampling. Particulate matter from the atmosphere will then be deposited on the microscope glass surface through the process of electrostatic precipitation, and it can be subsequently analyzed under the microscope.



Van de Graaf Generator, 200k Volts



The entire assembly operational



The electric ventilator fan with duct hose attached





The plastic collection container with electrode and 2 internal glass microscope slides

Another view of the container used, with the electrode visible. Porous filter material attached with a hose clamp reduces the flow rate and contains the atmospheric gas subject to the electric field.



Test case of smoke particulate matter. Smoke particles precipitated on the interior glass surface within approximately 10 seconds when subjected to the electric field of approx. 200k volts. This test was repeated 3 times upon which a layer of material coating the interior of the glass surface was plainly visible.



Particulate smoke material collected from the interior of the glass surface, with the use of a cotton swab.

Clifford E Carnicom Feb 25 2001

BIOLOGICAL OPERATIONS CONFIRMED

carnicominstitute.org/biological-operations-confirmed/

BIOLOGICAL OPERATIONS CONFIRMED Clifford E Carnicom Feb 25 2001 Edited Feb 28 2001, Edited Mar 15 2001, Edited Mar 21 2001

The process of electrostatic precipitation has been used to examine atmospheric samples in Santa Fe NM for particulate matter. The method used to establish the results presented herein are described on the page Electrostatic Precipitation Method Developed. During this investigation, it has been revealed that the atmosphere does contain inordinate biological components, which are by the the best visual analysis currently available, red blood cells. Red blood cells, possibly of a dessicated nature due to their reduced size, appear to have been identified in any and all of three separate atmospheric samples examined as a direct result of electrostatic precipitation tests conducted. The double concavity characteristic of red blood cells has been repeatedly identified in each sample that has been acquired. The normal size of human red blood cells is 7 to 8 microns in size. The size estimate of the cells measured thus far appears to range between 4 to 6 microns. Dessication of the cells remains a high consideration in the explanation of the cell size (in light of previous research presented on Biological Components Identified), as well as consideration that will be given to alternative species. Both individual cells and well as numerous clusters of cells have been identified. The cells in essentially all cases are surrounded by what appears to be binding organic materials. The amount of cells which occur on a microscopic slide exposed within the electrostatic apparatus for approximately 1 hour number in the scores. The work conducted must be under conditions of low relative humidity in order to generate sufficient voltage. Visibility of the materials has been enhanced through the use of iodine stain. The need for professional biological identification, medical and legal involvement, and the devotion of equipment and resources at a national level on these findings is now critical.

Biological components as an aspect of the aerosol operations up to this time have been considered as being of a limited nature, with their significance and relevance to overall agendas remaining unknown. These findings drastically alter that interpretation, and biological operations must now be considered as a major and dominant consideration within the aerosol operations. The methods of electrostatic precipitation outlined are now available for all researchers, professionals and activists across the nation to employ. The results being presented here can now be tested, refuted or confirmed by all parties with sufficient motivation and resources. It is noted that all three atmospheric samples have tested positive for the existence of these biological components, conducted on Feb 24 and Feb 25 2001 in Santa Fe NM. The need to conduct these tests and to perform the qualifying research is now paramount to the welfare of all citizens.

Research related to these findings will continue, and additional information will be presented as circumstances warrant. Air filtration and testing by more conventional methods involving HEPA filters also remains in progress.



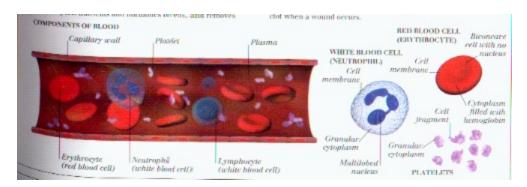
Red Blood Cells, Concavities Visible, approx. 2000x Atmospheric Sample Santa Fe NM Feb 25 2001



Red Blood Cells and encapsulating materials, approx. 2000x Atmospheric Sample Santa Fe NM Feb 24 2001



Red Blood Cells and encapsulating materials, approx. 2000x Atmospheric Sample Santa Fe NM Feb 24 2001



Human Blood Illustration (Note Characteristic Bi-concavity) Source: Ultimate Visual Dictionary of Science, DK 1998



Electrostatic Precipitator Construct – Van de Graaf Generator

ADDITIONAL RESEARCH:

Table of Red Blood Cell SizesSource : Veterinary Hematology by Schalm

Species	Size in Microns
Dog	7.0

Pig	6.0
Horse	5.8
Cat	5.8
Cow	5.8
Sheep	4.5
Goat	3.2

Species	Size in Microns
Primate – Monkey	~7
Human	~7

The following reply was received from a professional when an inquiry was sent requesting the size of primate blood cells:

"For all practical purposes i.e. lab equipment they are the same size as human rbcs – 6-8 or approx. 7 microns in dia. – but in reality some species may be bigger such as the baboon. One old ref that may be helpful is: Comp. Biochem. Physiol, 1977, pp 379-383, Pergamon press. This ref states rhesus rbcs are 6 microns in diameter. Perhaps MCV would be a better value to evaluate and it is easily found in the literature."

This response is appreciated.

Clifford E Carnicom Mar 02 2001

Purdue University Veterinary Hematology Slide Review (link https://vet.purdue.edu/vpb/clinpath/vpb555/imagerev/normrbc.htm dead as of 12/12/15)

Clifford E Carnicom Feb 25 2001

Additional items recently identified under the microscope include:

Mar 21 2001 : Juniper Pollen



Electrostatic Precipitation Sample : Juniper Pollen

Electrostatic Precipitation Exposure Time Approximately 1 Hour

Approximate magnification 1000x.

Distinguishing characteristics : star-shaped center depression, size 25 -35 microns. Image on right measured at 32 microns.



Library juniper pollen image from <u>www.pollen.com</u>

Edited Feb 28 2001 Edited Mar 15 2001 Edited Mar 21 2001

NIPR ACTIVITY INCREASES

carnicominstitute.org/nipr-activity-increases/



NIPR ACTIVITY INCREASES

Visitation activity by NIPR.mil has increased dramatically over past several days to www.carnicom.com. As designated within the <u>visitors</u> list to this site, NIPR has been researched to involve the following relationship to the United States Department of Defense:

NIPR – Department of Defense Network Operations (NIPRNet);

The Defense Information Systems Agency (DISA) has established a number of NIPRNet gateways to the Internet, which will be protected and controlled by firewalls and other technologies.

Any additional identifying information on this agency is appreciated, and may be posted publicly on the <u>message board</u> attached to www.carnicom.com.

Clifford E Carnicom Feb 28 2001

The following has been received by email on March 01 2001. Appreciation is extended to the sender for this additional information on NIPR:

I saw on your visitors list you wanted to know more information about NIPR? It is my opinion that NIPR is going to be a common "domain name" and will increase in frequency of visits. In other words being able to discriminate between various DoD websites will be harder to ascertain; as many of the people surfing your sites will be routing through NIPRnet. Obsfucate? Looks like it.

The DISA created NIPR so that NIPR is essentially a VERY secure, single point of contact for all DoD connections to the web. Imagine it as a super firewall for all of the DoD's various branches, partners, and educational institutions that work with the DoD.

To understand what NIPR offers the DoD, read this slideshow on DISA:

http://www.dpasweb1.day.disa.mil/webdpas/313a/disaa001.htm

Now the home page for NIPR:

http://www.nic.mil/dodnic/

United States of America Department of Defense Network Information Center

The NIC is operated by the Defense Information Systems Agency (DISA). It provides information and services that are mission critical to the operation of the worldwide IP router Defense Information Systems Network and other DoD sponsored networks.

The NIC: Operates the .MIL generic Top Level Domain (gTLD) Registry Operates the DoD Assigned Numbers Registry Operates the DoD Internet Routing Registry Provides Directory Service for Each Registry Manages and Administers the MIL gTLD Manages and Administers Sub-level Domain Name System (DNS) Domains Coordinates Actions Regarding Security Incidents and Network Vulnerabilities

Operates World Wide Web Servers Issues Network Management Bulletins and Other Announcements Maintains On-line Documentation Repository Manages, Administers, and Operates Dial-up Access Service Support Systems Monitors Use of the Dial-up Access System and Investigates Possible Abuse Provides General User Assistance from a Help Desk

And below is a link to info about what NIPRnet was envisioned to be...

http://cap.nipr.mil/MISC/OSDreleaseMemo.html

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

6000 DEFENSE PENTAGON

WASHINGTON, DC 20301-6000

August 22, 1999

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS CHAIRMAN OF THE JOINT CHIEFS OF STAFF UNDER SECRETARIES OF DEFENSE DIRECTOR, DEFENSE RESEARCH AND ENGINEERING ASSISTANT SECRETARIES OF DEFENSE GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE DIRECTOR, OPERATIONAL TEST AND EVALUATION ASSISTANTS TO THE SECRETARY OF DEFENSE DIRECTOR, ADMINISTRATION AND MANAGEMENT DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Increasing the Security Posture of the Unclassified but Sensitive Internet Protocol Router Network (NIPRNet)

The security of the Department of Defense's (DoD) information infrastructure is related to protection of the Unclassified but Sensitive Internet Protocol Router Network (NIPRNet) against intrusion and malicious activity.

Intrusion attempts are expected to increase as hackers may be tempted to masquerade their activities as Year 2000 (Y2K) bugs. Information assurance and network protection efforts hinge on identification, control and management of NIPRNet connections. Of particular interest and concern are the multitude of interconnections between the NIPRNet and the Internet. DoD Directive 5200.28, "Security Requirements for Automated Information Systems (AISs)," March 21, 1988, requires all DoD information systems, including networked computers, to comply with minimum security requirements. These security requirements pertain to any information technology (IT) system(s), regardless of the classification of the data processed.

And much more at the link above.

HEPA BIOLOGICALS CONFIRMED

carnicominstitute.org/hepa-biologicals-confirmed/

HEPA BIOLOGICALS CONFIRMED Clifford E Carnicom Mar 06 2001



Holmes HAP220 HEPA Filter Unit w/ Ionizer- Cost \$40 Claimed Filter efficiency 99% to 0.3 microns

In addition to filtering efforts in progress by the process of electrostatic precipitation, filtering by more conventional methods involving a HEPA (High Efficiency Particulate Air) filter unit are now in progress. The result of this testing is also indicating the presence of biological components within the atmosphere as has also been <u>found and reported</u> through electrostatic precipitation. The results of this work indicate biological components which again satisfy all the visual characteristics of red blood cells, with emphasis upon the presence of bi-concave surfaces. The cells found are again surrounded by an encapsulating or binding material which is receptive to iodine stain. Although iodine stain is not a conventional stain treatment for red blood cells, it appears to be an important aid in visually identifying the encapsulating or binding medium in which the cells are frequently found. An important characteristic of the cells found is their size, which approximates 5 microns in diameter. Human blood cells average 7 microns in diameter, and a chart of blood cell sizes <u>is available</u>. Consideration of dessication processes, e.g., freeze-drying, as well as alternative species remains a strong factor in the analysis of cell type. Exposure time for the filter

cartridge is 1 week, as opposed to approximately 1 hour for the <u>electrostatic method</u>. The air sampling has been conducted outdoors at approximately 10 feet in elevation above ground level, within a non-agricultural, non-industrial, high desert rural area.

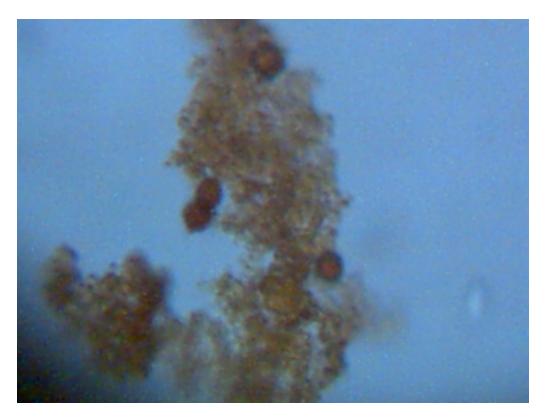
The filter unit that has been used is widely available and inexpensive, and when coupled with a microscope affords the opportunity for all citizens to conduct serious research regarding the aerosol operations that remain underway without citizen informed consent. A microscope of approximately 400 power will be sufficient to identify the cellular and binding material. The concavity of the cells will be slightly visible at that level, with variations in lighting and depth of field showing a ring structure indicative of the concave surfaces. Two separate methods of filtering operating independently over time are now producing identical results. These methods of filtering and identification are now available to all citizens with modest means. The identification of the cell types found , and an accountability for their existence is of critical importance to the public welfare, and it is hoped that independent researchers, professionals and activists will contribute to that cause.



Holmes HAP220 HEPA Filter Cartridge – Cost \$12



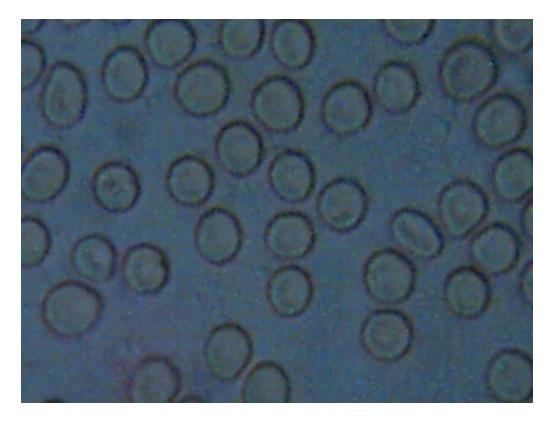
Holmes HAP220 HEPA Filter Unit with Filter Cartidge Exposed Less Foam Cover Filter



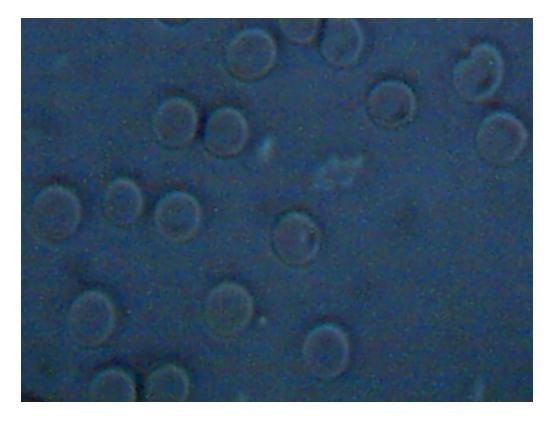
Biologicals Identified within HEPA Filter Cartridge Exposure Time : One Week Magnification : Approx. 2000x – Estimated Size : 5 microns



Biologicals Identified within HEPA Filter Cartridge Exposure Time : One Week Magnification : Approx. 2000x – Estimated Size : 5 microns



CONTROL ANALYSIS : Human Blood Cells – Bi-concavities Visible Magnification : Approx. 2000x – Estimated Size : 7 microns



CONTROL ANALYSIS : Human Blood Cells – Bi-concavities Visible Magnification : Approx. 2000x – Estimated Size : 7 microns

FALSE STATEMENT ISSUED

carnicominstitute.org/false-statement-issued/



FALSE STATEMENT ISSUED Mar 08 2001 Clifford E Carnicom

A statement by a Mr. Patrick Minnis follows at the end of this page.

Let it be known for the record that:

Any statements, implications, or insinuations made by any individuals, including a Mr. Patrick Minnis, that I have received monetary compensation for personal gain for participation in any video documentary projects are PATENTLY FALSE and are herein refuted. Monetary compensation for personal gain is excluded as a factor in any research that I have conducted, am conducting, or will continue to conduct on the aerosol operations that are occurring without informed consent."

Those that wish to research this issue may wish to contact the publisher of any video or informational sources that are referred to. In addition, let it be known that I specifically did request that a written statement of non-compensation be included within the recent documentary that is most likely being referred to. I have not produced any videos to date, but I have contributed information to various sources for the public welfare.

Clifford E Carnicom Mar 08 2001

The following is an excerpt from a recent relayed posting on the Jeff Rense internet site. The <u>link to this page</u> is entitled "Nasa Scientist Quoted in USA Today Talks About Chemtrails".

"Date 2-28-01 From: Patrick Minnis <p.minnis@larc.nasa.gov Subject: Jet aerosol spraying CC: g.g.gibson@larc.nasa.gov

Dear xxx,

Your email, copied below, was forwarded to me because I conduct research on contrails. I am sorry to see that you have been misinformed about the nature of contrails. Unfortunately, there is an ample supply of people who are ready to spread rumors and propaganda to upset people simply to draw attention to themselves or to make a buck (e.g., Carnicom video). Because the origin of the secret plots promoted by these people is the government, it is automatically impossible for anyone from the government to refute the accusations."

MAGNETOHYDRODYNAMIC (MHD) CONSIDERATIONS

Carnicominstitute.org/magnetohydrodynamic-mhd-considerations/



MAGNETOHYDRODYNAMIC (MHD) CONSIDERATIONS Mar 12 2001 Clifford E Carnicom

Evidence continues to accumulate that the ionization level of the atmosphere has been modified in a significant way as a result of the aircraft aerosol operations. A current topic of research is the topic of magnetohydrodynamics, which is defined as follows:

"The study of the interactions between a conducting fluid and a magnetic field. MHD is important in the study of controlled thermonuclear reactions in which the conducting fluid is a plasma confined by a magnetic field. Other important applications include the magnetohydrodynamics power generator. In the open-cycle MHD generator a fossil fuel, burnt in oxygen or preheated compressed air, is seeded with an element of low ionization potential (such as potassium or cesium). This element is thermally ionized at the combustion temperature (usually over 2500K) producing sufficient free electrons (e.g. K -> K+ + e) to provide adequate electrical conductivity. The interaction between the moving conducting fluid and the strong applied magnetic field across it generates an electromagnetic field on the Faraday principle, except that the solid conductor of the conventional generator is replaced by a fluid conductor."

Oxford Dictionary of Science, 1999.

From Patent No. 4686605 Aug 11 1987 by Bernard Eastlund:

"The generation of electricity by motion of a conducting fluid through a magnetic field, i.e., magnetohydrodynamics (MHD), provides a method of electric power generation without moving mechanical parts and when the conducting fluid is a plasma formed by combustion of a fuel such as natural gas, an idealized combination of apparatus is realized since the very clean-burning natural gas forms the conducting plasma in an efficient manner and the thus formed plasma, when passed through a magnetic field, generates electricity in a very efficient manner. Thus the use of a fuel source [42] to generate a plasma by combustion thereof for the generation of electricity essentially at the site of occurrence of the fuel source is unique and ideal when high power levels are required and desirable field lines intersect the earth's surface at or near the site of the fuel source. A particular advantage for MHD generators is that they can be made to generate large amounts of power with a small volume, light weight device. For example, a 1000 megawatt MHD generator can be construed using superconducting magnets to weigh roughly 42,000 pounds and can be readily air lifted."

From Conceptual Physics, by Paul Hewitt, 1998:

"Plasma Power : A higher temperature plasma is the exhaust of a jet engine. It is a weakly ionized plasma, but when small amounts of potassium or cesium metal are added, it becomes a very good conductor, and when it is directed into a magnet, electricity is generated. This is MHD power, the magnetohydrodynamic interaction between a plasma and a magnetic field."

From the web page http://magnetohydrodynamics.homepage.com/

"Weapons:

The use of MHD in weapons is endless, with an effective MHD defence system in place, it is possible to use magnets, harnessing only the power of air, to create huge electric forces, using (8-10) Tesla Coils for defence would be made possible, of course the field of High Temperature Superconductivity (HTSC) would have to be conquered."

USA TODAY -WILLIAM THOMAS RESPONSE -CORRECTION

carnicominstitute.org/usa-today-william-thomas-response-correction/



USA TODAY -WILLIAM THOMAS RESPONSE -CORRECTION Clifford E Carnicom Mar 15 2001

An article published by USA Today on Mar 07 2001 follows at the bottom of this page.

A statement by William Thomas is posted by request. This statement does require a correction in order to accurately characterize the results of my work, as is denoted below with an asterisk, with the substitution of the word CLOUDS instead of the word contrails. I have, in the past, presented studies involving contrail *dissipation* and *cloud* formation; studies in progress related to contrail *formation* have not yet been published. This correction has been relayed to William Thomas.

Clifford E Carnicom Mar 15 2001

The statement issued by William Thomas is as follows :

"As a professional journalist for more than 30 years I am deeply angered and embarrassed by this story which recently appeared in one of America's most influential newspapers. After speaking with Clifford Carnicom and other veteran chemtrail researchers, Traci Watson interviewed me for more than an hour. My extensive documentation must have been too convincing to include in a dismissive article that is 100% accurate concerning contrails – and 100% disinformation regarding the sky-filled reality of chemtrails.

Most telling of all, I suggested that Ms. Watson call Clifford Carnicom back and ask for his U.S. government meteorological data showing that on days of intense aerial gridding over Sante Fe, New Mexico the temperature and humidity at the altitudes aircraft were observed spreading thick plumes made the formation of contrails* [CLOUDS] absolutely impossible.

In choosing to ignore the facts while pursuing a blatant editorial agenda, Ms. Watson has disgraced her readers and her craft."

Sincerely, William Thomas

CONTACT USA TODAY

Anyone wishing to contact Traci Watson in a respectful manner regarding her article can send a brief email to this senior reporter at: twatson@usatoday.com

The USA Today toll-free number is: (800) 872-3410

From USA TODAY March 7, 2001

Conspiracy theorists read between lines in the sky By Traci Watson

A new conspiracy theory sweeping the Internet and radio talk shows has set parts of the federal government on edge. The theory: The white lines of condensed water vapor that jets leave in the sky, called contrails, are actually a toxic substance the government deliberately sprays on an unsuspecting populace.

Federal bureaucracies have gotten thousands of phone calls, e-mails and letters in recent years from people demanding to know what is being sprayed and why. Some of the missives are threatening. It's impossible to tell how many supporters these ideas have attracted, but the people who believe them say they're tired of getting the brush-off from officials. And they're tired of health problems they blame on "spraying."

"This is blatant. This is in your face," says Philip Marie Sr., a retired nuclear quality engineer from Bartlett, N.H., who says the sky above his quiet town is often crisscrossed with "spray" trails. "No one will address it," he says. "Everyone stonewalls this thing."

The situation Marie and others describe is straight out of The X-Files. He and others report one day looking up at the sky and realizing that they were seeing abnormal contrails: contrails that lingered and spread into wispy clouds, multiple contrails arranged in tick-tacktoe-like grids or parallel lines, contrails being laid down by white planes without registration numbers.

Believers call these tracks "chemtrails." They say they don't know why the chemicals are being dropped, but that doesn't stop them from speculating. Many guess that the federal government is trying to slow global warming with compounds that reflect sunlight into the sky. Some propose more ominous theories, such as a government campaign to weed out the old and sick. Exasperated by persistent questions, the Environmental Protection Agency, NASA, the Federal Aviation Administration and the National Oceanic and Atmospheric Administration joined forces last fall to publish a fact sheet explaining the science of contrail formation. A few months earlier, the Air Force had put out its own fact sheet, which tries to refute its opponents' arguments point by point.

"If you try to pin these people down and refute things, it's, 'Well, you're just part of the conspiracy,' " says atmospheric scientist Patrick Minnis of NASA's Langley Research Center in Hampton, Va. "Logic is not exactly a real selling point for most of them." Nothing is "out there" except water vapor and ice crystals, say irritated scientists who study contrails. Some, such as Minnis, are outraged enough by the claims of chemtrail believers that they have trolled Internet chat rooms to correct misinformation or have gotten into arguments with callers.

"Conspiracy nonsense," snorts Kenneth Sassen, an atmospheric scientist at the University of Utah. "These things are at 30,000 to 40,000 feet in the atmosphere. They're tiny particles. They're not going to affect anyone."

The cloud-forming contrails that conspiracy theorists find so ominous are "perfectly natural," Minnis says. The odd grid and parallel-line patterns are easily explained as contrails blown together by the wind, scientists say.

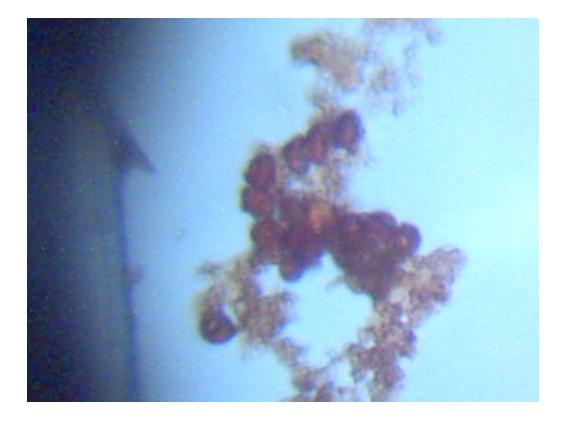
COLORADO HEPA BIOLOGICALS CONFIRMED

carnicominstitute.org/colorado-hepa-biologicals-confirmed/

COLORADO HEPA BIOLOGICALS CONFIRMED Clifford E Carnicom Mar 16 2001

A second HEPA (High Efficiency Particulate Air) filter sample has now been analzyed under the microscope. This filter was received from Aspen, Colorado, a high altitude region. This filter was exposed to the outside atmosphere for a duration of five days at approximately 15 feet above ground level. This HEPA filter also clearly shows the frequent presence of biological materials. Again, the best visual analysis available at this time indicates that these cellular materials appear to be erythrocytes (red blood cells). This is indicated by the uniformity, the color, the size and the bi-concave nature of the cells. The sizes of the cells again measure at approximately 5 microns in diameter. Encapsulating or binding materials again surround the majority of the cells that are found. The results of this analysis are completely and exactly identical with the <u>first HEPA filter analysis</u> and the <u>electrostatic precipitation</u> results from Santa Fe, New Mexico. This latest review is now the 4th atmospheric sample that has been analyzed under the microscope, and the results are identical for each. Two <u>earlier</u> airbone samples of fibrous samples, as have been received the EPA without acknowledgement, also show the presence of similiar biological components.

These results again demonstrate the urgent need for independent, professional and verifiable biological identification and medical analysis of the samples which are being disclosed.



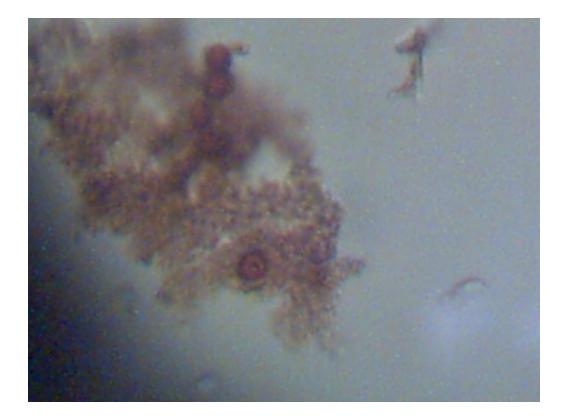
Biologicals Identified within HEPA Filter Cartridge Note Concavities Visible Exposure Time : 5 days Magnification : Approx. 2000x

The only sufficient resolution to the questions raised is that of testing and positive identification. Discourse is insufficient.

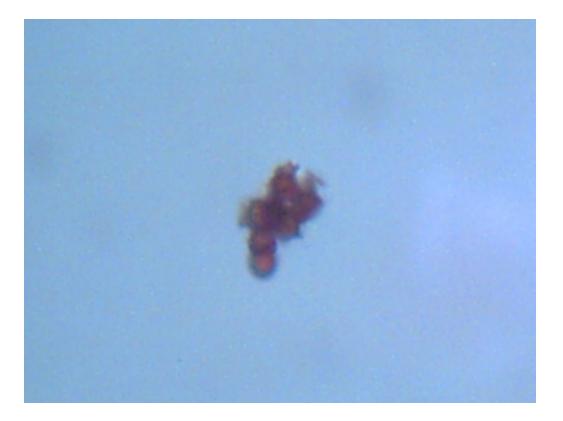
The visibility of the binding or base material, and consequently the cells by the process of contrast, appears to be significantly enhanced with the use of an iodine stain. A dessication, or freeze-drying process remains a viable consideration because of the reduced size (<u>note earlier studies</u>), as well as the consideration of alternative species. Any corrections to these findings will be presented as they are appropriate.

It is urgent that the sampling process now be extended across the entire nation. Two locations within the U.S. separated by approximately 250 miles straight line distance are showing identical results. The methods and equipment for HEPA filtering are relatively inexpensive and accessible, and are described on a <u>previous</u> page. It is requested that such samples be sent for professional, independent and verifiable analysis, and the results disclosed to the public for review. Citizens are free to contact me with sample filters if they have no other resources available to them.

Clifford E Carnicom Mar 16 2001

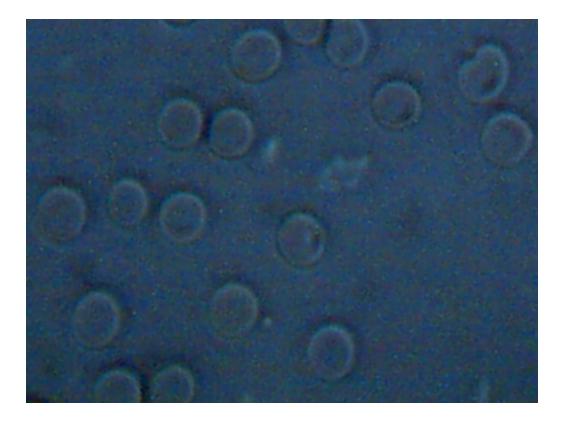


Biologicals Identified within HEPA Filter Cartridge Note Concavity Visible Within Lower Cell Exposure Time : 5 days Magnification : Approx. 2000x



Biologicals Identified within HEPA Filter Cartridge Exposure Time : 5 days Magnification : Approx. 2000x

CONTROL INFORMATION ONLY



CONTROL ANALYSIS : Human Blood Cells – Bi-concavities Visible Magnification : Approx. 2000x – Estimated Size : 7 microns

Edited Mar 22 2001

QUESTIONS : 2001

carnicominstitute.org/questions-2001/



QUESTIONS : 2001 Mar 20 2001

The following statement has been received anonymously on Mar 20 2001 and is posted on behalf of the sender:

QUESTIONS: SPRING 2001

** Is it possible that years of [well-documented] experimentation involving chemical releases and discharge of microwave energy, etc. into earth's ionosphere and magnetosphere may have caused significant disruption to the stratosphere, including the ozone layer, and possibly disruption of atmospheric chemistry and circulation? Is it possible that an "initial disruption" of sorts may have occurred decades ago?

** Is it possible, that the advent of and steady increase in subsonic and supersonic aviation have likewise probably caused significant disruption of stratospheric and tropospheric chemistry and circulation, including negative impact on the stratospheric ozone layer, and have also probably caused significant disruption of sensitive seasonal processes at the tropospheric boundary layer?

** Is it possible that breakdown products of nuclear waste are being disposed of via satellite into the near-earth space environment?

** Is it possible that the jetstream has been/is being tampered with, directly or indirectly?

** Is it possible that if, in fact, profound disruption of earth's systems, particularly atmospheric, has occurred, this would be known to the parties involved and that some sort of cover-up might then be in order, from their point of view? Is it possible that the much-publicized ongoing "debate" over "global warming" may be just such a coverup? Is it possible that the facts of very real and progressive damage to all of our ecosystems from various forms of surface and atmospheric pollution are being buried under the larger issue [sic] of a bogus "debate" re: "global warming"? Is it possible that the parties most directly invested in this "debate" are stalling for time in order that they might more advantageously position themselves for dealing with the economic ramifications of taking responsibility for their minimally-controlled pollution of this planet?

** Is it possible that the militarization of the near-earth space environment is going to have an effect on conditions in earth's atmosphere and possibly at the surface? Is it possible that the "Missile Defense System" as it has been "presented" to the public for the last 15 years is not, in fact, what is actually being developed for ultimate implementation? Is it possible that what is actually intended for deployment is a modular, land- and space-based communications and weapons system? Is it possible that this multi-faceted system involves, in no insignificant part, the application of specific directed-energy concepts as originally developed by Nikola Tesla, and kinetic energy concepts as well? Is it possible that specific atmospheric "modifications" may be required to accommodate certain components [advanced radar and communications] of such a system? Is it possible that certain components of this system are not only being tested, but are already being deployed, in "modular" fashion?

** Re: the much-discussed "biological" aspect of this issue – Is it possible that DARPA [and the US Army in particular], in conjunction with several academic institutions, private research facilities and private industry, is overseeing an extensive R&D program involving development of methods for detection of bio/chem agents in the global environment? Is it possible that this program involves many sub-programs which are conducted in the atmosphere [aerosols] and on the ground and in the water? Is it possible that "detection", ideally and ultimately space-based, of not only bio/chem agents, but global pollution, radiation leaks, etc. is a primary R&D focus generally?

Now for the trails themselves. Is it possible:

** that the now relatively continuous presence of these persistent trails and/or the resultant persistent, bizarre cloud cover has definitely influenced weather patterns and even the climatic reality of the areas over which these "conditions" are observed?

** that the reduction in unoccluded sunlight resulting from the above-referenced persistent cloud cover is negatively affecting people's general physical health and their mental and emotional states?

** that a component of this persistent "trails dispersion" may be in conjunction with studies involving refinement of advanced radar and communications concepts in preparation for deployment of a land- and space-based weapons system?

** that ongoing upper-atmospheric dispersion of a Telleresque particulate "shield" may, in fact, be a reality, albeit perhaps a "regional" situation?

** that there is especially continuous presence of cloud "cover" along the US borders, particularly coastal?

** that atmospheric moisture is now routinely being steered around and either enhanced or suppressed as "desired conditions" dictate, and that this may be the reason for drought in some areas and flooding in others?

** that one possible "biological" effect of relatively continuous cloud "cover" would be the eventual undermining of previously healthy immune systems due to significant reduction in the amount of full-spectrum sunlight necessary to maintain same?

** that if it were specifically and exclusively a radical change in jet fuel composition, or simply an increase in commercial air traffic, that are causing the graphic transformation of our skies, there would be an open public announcement to this effect? Repeat: an open public announcement?

10 March 2001

Posted on behalf of the sender by C.E. Carnicom with permission of the author. Mar 20 2001

CONTRAIL DISTANCE FORMATION MODEL

carnicominstitute.org/contrail-distance-formation-model/



CONTRAIL DISTANCE FORMATION MODEL Clifford E Carnicom Mar 22 2001 Edited Dec 19 2014 Edited Jun 01 2016

A model has been developed to estimate the distance behind the engines that a contrail, i.e., condensed trail of water vapor, is expected to form. The results of this model agree exceptionally well with a statement issued by the United States Air Force that "contrails become visible roughly about a wingspan distance behind the aircraft". There is now an abundance of photographic and video evidence that consistently and visibly demonstrates the repeated formation of aerosol trails in much closer proximity to the engines than that which is established by the Air Force, as well as that which is predicted from the model described below. These trail formations are in direct contradiction to a statement of fact issued by the United States Air Force. This evaluation now adds to the multitude of studies which conclusively demonstrate that the emissions from these aerosol operations are not composed primarily of water vapor. This model is not intended to encompass all variables that may be in effect, but does represent a rational attempt to model the physics of contrail formation times involved. Any corrections to this study will be made as is appropriate. This model is in addition to that previously developed related to expected contrail dissipation times, as well as originating relative humidity studies at flight altitude.

The model is developed as follows:

Let us assume that the temperature of the exhaust emissions of the aircraft is approximately 1000 deg. C., which is an apparent reasonable estimate (see <u>Principles</u> <u>of Jet Engine Operation</u>). The model can easily be generalized to encompass any reasonable ranges in temperature that are expected within the combustion process and subsequent exhaust emissions. The model is not highly sensitive to expected changes in temperature at this level, and if a more accurate value becomes available, it will be used in the future.

Let us assume the temperature of the atmosphere at flight altitude, approximately 35,000 ft. MSL is -50 deg. C. Again, each variable within the model can be generalized as needed, and the sensitivity of the model to these changes can be evaluated.

The amount of heat extraction required to cool the exhaust vapor can be given as follows:

```
H = dH(ice) + dH(melting) + dH(water) + dH(vap) + dH(steam)
```

for the sake of initial example and simplicity, and to demonstrate numerical results, let us apply this to 1 gram of water:

```
-H = (1 gm) (.5 cal / (gm * K) ) ( 50 deg. K )
+ (1 gm) (80 cal / gm )
+ (1 gm) (1.0 cal / (gm * K) ) (100 deg. K )
```

```
+ (1 gm) ( 540 cal / gm )
```

```
+ (1 gm) ( .33 cal / gm ) * 900 deg. K)
```

or

H = -(25 + 80 + 100 + 540 + 300) cal. = -1045 cal. required to cool steam at 1000 deg. C. to 1 gm of ice at -50 deg. C.

Now,

```
1 calorie (cal) = 4.1868 Joules (J)
```

Therefore,

-1045 cal = -4375 J.

Next, to consider a realistic particle size for emissions from aircraft, the Max Planck Institute has stated that the average size of particles emitted from aircraft is approximately 30 to 200 microns in size. As a side note, the average particle size of cloud nuclei is stated by Vincent Schaefer, *Atmosphere*, to be from 0.2 to 0.3 microns. Let us assume an average size of 115 microns on each side of a cube particle.

Since 1 gm. of water = 1 cu. cm in volume, a cube particle size of 115 microns in dimension on each side has a volume of:

(115E-6)³ meters, or 1.52E-12 cu. m.

Since 1 gm. of water has a volume of (1E-2)[^]3 meters, the volume of a gram of water is (1E-6) cu. m.

The ratio in volume of a particle of dimension 115 microns to a gram of water is:

1.52E-12 cu. m. / 1 E-6 cu. m

or

(1.52E-6)

The amount of heat required to cool the 115 micron particle is therefore

(1.52E-6) (4375 J) = 6.654E-3 J. for a particle 115 microns thick and corresponding to a temperature change of 1050 deg. C. [note units are therefore: J / (m * K)]

Now evaluate the thermal conductivity of the medium in which the particle exists, i.e., air. From the REA Handbook of Mathematical, Scientific, and Engineering Formulas, Tables, Functions, Graphs, and Transforms, the thermal conductivity of air at – 50deg. C. is given as .012 Btu / (hr * ft * deg. F).

Converting this value to SI units,

.012 Btu / (hr * ft * deg F.) -> (1055 J / Btu) / ((3600sec/hr) * (.3048m/ft.) * ((5/9)deg. K / deg. F))

or the thermal conductivity of air at a temperature of -50 deg. C can be given as

.02075 J / (s * m * K)

Therefore the amount of time required to cool the particle from 1000 deg. C to -50 deg. C is given by:

(6.654E-3 J / (m * K)) / (.02075 J / (s * m * K)) = .321 seconds.

Now for an aircraft traveling at 500 mph, this translates to approx. 733 ft./sec.

Therefore, the particle evaluated will cool to the ambient temperature in approximately:

```
(733 ft./sec) * .321 sec = 235 feet behind the engines of the aircraft.
```

A Boeing 757 measures approximately 155 ft. in length. The distance from the rear of the engines to the tail of the aircraft is approximately 80 feet (scaled). Therefore the contrail is expected to form approximately (235 ft. – 80 ft.), or approximately 155 ft. behind the tail of the aircraft. The wingspan of a Boeing 757, being used as a representative example, is approximately 125 feet in width. The results of this model agree quite well (approx. 30 ft. coupled with the transition zone) therefore, with the expected physics and chemistry of water vapor as well as with the statement provided by the United States Air Force. The model will show itself to be sensitive to particle size. "Contrail" formation in front of, or immediately adjacent to the stabilizer region of the aircraft, is not to be expected either from the results of this model, or from that statement issued by the Air Force.

Significant deviations from these results as well as from the USAF statement, as they occur repeatedly in conjunction with the aerosol operations, are tangible evidence of non-water vapor emissions that are involved.

Clifford E Carnicom Mar 22 2001

Additional Note (Dec 19 2014):

Correspondence regarding this paper of 2001 has been received by me directly for the first time during the current week. I will review this paper that was written more than a decade ago as time and circumstances permit; I estimate that this will take place within the next month of two from this postscript. I am currently involved with active projects that require my attention and efforts. In the interim, and in the spirit of open disclosure and fair consideration, the correspondence received is linked immediately below.

Correspondence received on the week of Dec 19 2014.

On the first pass to attempt to access the information referred to, the following error is encountered on both sources (as is forewarned in the correspondence). This information will be required to evaluate the matter further.



It appears that the information will originate from the following source:

Institute of Atmospheric Physics

Clifford E Carncom Dec 19 2014

Additional Note (Jun 01 2016):

The link referenced in the correspondence is operational as of this date, and I have reviewed the material. The issue here appears to be a classic case of using the logic fallacy of "the exception proves the rule". If the material is reviewed with respect to its entirety and context, it will be seen that the model and statements referred to within the correspondence are in direct agreement with the model presented in this paper. As provided:

15.3 The Schmidt–Appleman Criterion

The Schmidt-Appleman criterion (SAC) of contrail formation requires liquid saturation to occur locally in the plume of aircraft exhaust gases during *isobaric* mixing (at constant pressure) with cold ambient air. This condition is satisfied when the ambient temperature T is below a threshold temperature T_c . This condition is also satisfied when the *relative humidity U* for liquid saturation is above a critical humidity U_c . This humidity condition is computationally more efficient than the temperature criterion (Ponater 2002). To good approximation (Schumann 1996),

$$T_c = 46.46 + 9.43 \ln(G - 0.053) + 0.72 \left[\ln(G - 0.053)\right]^2, T_c \text{ is units of } ^{\circ}\text{C} \text{ and } G \text{ in } \text{Pa/K}, \quad (15.1)$$

$$G = \frac{c_p p E I_{H_2 O}}{(M_{H_2 O}/M_{air}) Q_{fuel}(1-\eta)}, \ \eta = \frac{VF}{m_{fuel} Q_{fuel}}, \ U_c = \frac{G(T-T_c) + p_{liq}(T_c)}{p_{liq}(T)}$$
(15.2)

propulsion efficiency η relates the work performed by propulsion of an aircraft with thrust F and speed V relative to the combustion energy provided by a fuel with specific combustion heat Q_{fuel} at flow rate m_{fuel} . Typically, η varies from 0.2 (for older jet aircraft) to 0.35 (modern jet aircraft at cruise). Obviously, increasing efficiency η causes more contrails because of less heat emission into young contrails, with contrait formation at lower altitudes and higher ambient temperatures.

For kerosche driven aircraft with v = 0.3, the SAC implies contrail formation in the aviation *standard atmosphere* to occur above 8.4 km and below 14 km. For an absolutely dry standard atmosphere, this range starts above 10 km altitude. Contrails may also form near ground in very cold regions of the Earth atmosphere (Alaska, Siberia in winter). For regenerative fuels, which often contain a higher fraction of hydrogen than kerosene, the vertical altitude range of contrail formation is slightly larger. For threshold conditions, contrails become visible about one wing span behind the engines. For lower temperature, contrails can be seen forming already a few meters behind the engines.

The SAC has been verified experimentally (Busen and Schumann 1995; Jensen et al. 1998b; Kärcher et al. 1998; Schumann 2000). For example, Fig. 15.3 shows measured cases. The measurements show that contrails do not form when the mixing line exceeds ice saturation, but not liquid saturation.

If the section is read in its entirety, the following points are clear.

- 1. The standard atmosphere is chosen as the reference. This is fitting and proper as it is the most comprehensive model of atmospheric conditions that exists for physical reference on the state of the atmosphere.
- 1. The "threshold temperature" is the critical temperature of formation for the contrail , and it is a primary focus for creation of the model to begin with.
- Under standard atmospheric conditions and under the threshold conditions, i.e., exactly the conditions of research for all models (Carnicom, Schmidt-Applebaum and the U.S.Air Force) the conclusion is exactly the same. Approximately one wingspan behind the aircraft is the norm of formation for the contrail under standard atmospheric conditions.

- The model then provides the exception that under "lower" temperatures (i.e., NOT standard), the distance of formation "can" be less. This is the exception to the norm, and it is always reasonable in model formation to allow for exceptions. The temperature magnitudes for the exception case are not defined, as it is fair to assume that they are anomalous and outside the range of normal modeling. Exceptions are not the norm, and cannot be claimed to account for the norm. This fallacy of logic denies the value, purpose and objective of the modeling process itself.
- 1. The paper stands as written.

Clifford E Carnicom Jun 01, 2016

MAR 26 2001 HEPA: CELLS NOT FOUND

carnicominstitute.org/mar-26-2001-hepa-cells-not-found/



MAR 26 2001 HEPA: CELLS NOT FOUND Clifford E Carnicom Mar 26 2001

A third HEPA (High Efficiency Particulate Air) filter sample has now been analzyed under the microscope. This filter was exposed to the outside atmosphere for a duration of 10 days at approximately 10 feet above ground level in Santa Fe, New Mexico. This filter was placed into service on Mar 16 2001 and has been taken out of service on Mar 26 2001.

There is a noticeable lack of biological cells that satisfy the visual characteristics of red blood cells, or erythrocytes, within this sample. The results of this analysis are in distinct contrast to the studies of Feb 25 and Mar 16 2001 that have been presented earlier. The results of this sample analysis are identical with a result obtained by the method of electrostatic precipitation on Mar 21 2001. Incidentally, the presence of juniper pollen, distinctive in appearance and measuring approximately 25-30 microns in diameter (vs. bi-concave approx. 5 microns), is frequent and is now easily observed.

There remains abundant particulate and potential organic matter which requires further identification in all samples that have been acquired. The current investigation is focused simply on the unexpected and repeated identification of bi-concave circular cells of approximately 5 microns in diameter, that satisfy all visual characteristics of erythrocytes, or red blood cells. All calls for professional assistance to conduct further exact identification and the repetition of methods and testing measures have thus far gone unheeded.

Within the current sample of Mar 26 2001, the matrix, base or encapsulating material that was repeatedly identified in the analyses of Feb 25 2001 and Mar 16 2001 may remain present. Further examinations will be required to resolve this question. There does appear to be the continued presence of organic material with a sub-structure at the micron level or smaller, which is beyond the limit of the available equipment to examine adequately. This material under examination, the boundaries of which are irregular and variable in size, is also very receptive to an iodine stain.

These results demonstrate the need for continuous monitoring of the atmosphere at the microscopic level to ascertain the presence of (or subsequent lack of) certain biological cell components as have recently been identified throughout a 4 week period from two high elevation locations separated by approximately 250 miles distance. HEPA filters and equipment are widely available at reasonable cost to all citizens to extend the current testing procedures.

The examination of additional HEPA filters on a continuous basis from numerous monitoring locations across the country will be beneficial. Those without any alternative resources for examination are welcome to contact me directly for assistance. The need for professional independent medical, biological and chemical analysis of any HEPA atmospheric filter samples obtained remains constant.

Clifford E Carnicom Mar 26 2001

VISIBILITY STANDARDS CHANGED

carnicominstitute.org/visibility-standards-changed/

VISIBILITY STANDARDS CHANGED Clifford E Carnicom Mar 30 2001 Edited Apr 01 2001

The following graphs obtained from the National Climatic Data Center, National Oceanic and Atmospheric Administration, demonstrate a significant alteration in visibility reporting methods as well as data results that warrant a further explanation to the American public.

It will be noted that in October of 1997 a change in the reporting system of visibility data was reduced from a former maximum of 40 miles to a limit of 10 miles. It is a reasonable question to ask as to why that change was made, and whether or not it was made in anticipation of certain events to follow that involve large scale aircraft aerosol operations over large scale geographic regions.

One explanation which has been offered through recent correspondence for the switch to 10 mile visibility limits involves the use of the ASOS, or the Automated Surface Observing System by the National Weather Service, which incorporates a maximum visibility limit of 10 miles. Information on this system can be viewed at the following link:

<u>http://www.nws.noaa.gov/modernize/asostech.html</u>. Any reason for the actual change in standard remains unidentified at this point. Remaining in need of further accounting is the significant degradation in visibility as evidenced by the data which follows this change in standard.

It is observed that there are highly significant degradations in the visibility data immediately following this change in the reporting method. Immediately after this change, the dramatic increase in visibility reports of less than 10 miles is quite apparent.

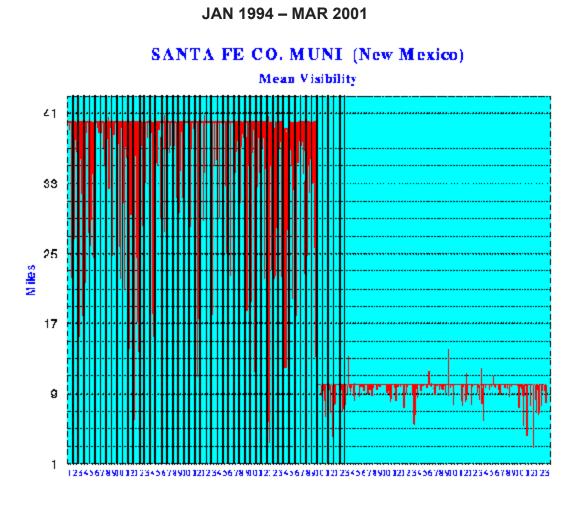
The graphs shown are taken from climatic archive data available for Santa Fe, NM from Jan 1994 to Mar 2001. Three different time periods are shown to aid in demonstrating the magnitude of change which has occurred in visibility. The first graph shows all data available inclusive from Jan 1994 to Mar 2001. The second graph shows the transition zone during which the visibility standards were altered. This graph showns a period from Jan 1996 to Dec 1998; the change in reporting standard

was made in Oct 1997. The third graph shows recent data, where visibility below 10 miles is now a regular occurrence. This graph shows the period from Jan 1999 to Mar 2001.

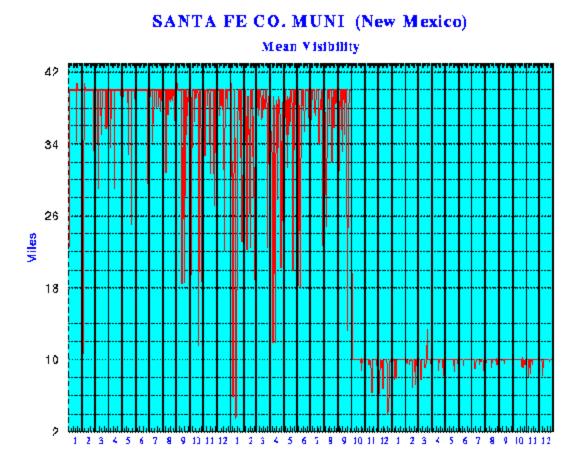
It will be valuable for other citizens to conduct similar archive research in varying geographic regions. This data is available on the NCDC site at <u>http://www.ncdc.noaa.gov/</u>.

It is a reasonable to suggest that an investigation be conducted to seek an adequate explanation for the change of a significant meteorological reporting standard that has been made at a national level, and the subsequent deterioration in visibility that correlates directly with the advent of large scale aerosol operations conducted without informed citizen consent.

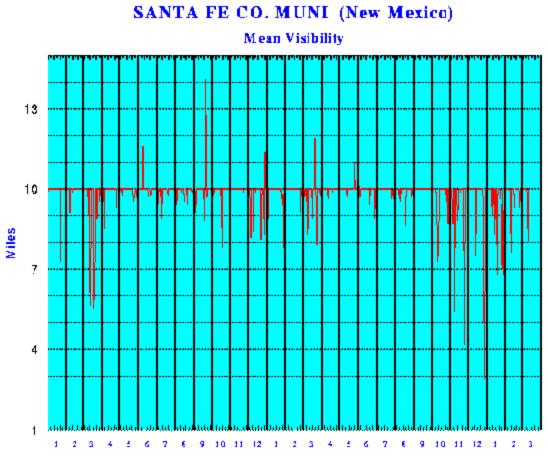
VISIBILITY GRAPHS : SANTA FE, NM



January, 1994 - March, 2001



January, 1996 - December, 1998



January, 1999 - March, 2001

Note: Data points above the maximum reporting standard apparently indicate missing observations.

Clifford E Carnicom Mar 30 2001 Edited Apr 01 2001

pH DATA CONFLICT

carnicominstitute.org/ph-data-conflict/



pH DATA CONFLICT Clifford E Carnicom Apr 01 2001

A source of information has recently been submitted to me which, upon cursory review, demonstrates a conflict in the pH data results being obtained by citizens across the country with the United States goverment sources of this same data. More complete information on this report as well as the source material from the United States Geological Survey will be presented in the near future.

If such a conflict is identified to exist, the situation will further intensify the need and demand for independent professional conduct and verification of pH rainfall test results across the nation.

To begin the process of comparison, the USGS source being provided is:

http://water.usgs.gov/nwc/NWC/pH/html/ph.html

This data may be contrasted with that being provided by citizens on an ongoing basis at:

http://carnicominstitute.org/wp/rainfall-ph-test-reports/

NIPR.MIL 10 1/2 HOUR VISIT

carnicominstitute.org/nipr-mil-10-12-hour-visit/



NIPR.MIL 10 1/2 HOUR VISIT Clifford E Carnicom April 01 2001

Let it be known that on Mar 31 2001 at 08:54 MST NIPR.MIL, the United States Department of Defense Network Operations, completed a visit to this website, www.carnicom.com. The duration of this uninterrupted visit was approximately 10 1/2 hours and it involved an inspection or review of 53 web pages within this same internet site.

The purpose of NIPR is described below.

As designated within the <u>visitors</u> list to this site, NIPR has been researched to involve the following relationship to the United States Department of Defense:

NIPR – Department of Defense Network Operations (NIPRNet);

The Defense Information Systems Agency (DISA) has established a number of NIPRNet gateways to the Internet, which will be protected and controlled by firewalls and other technologies.

The following information was also provided on Mar 01 2001 by a citizen to further describe the role and function of NIPR:

The DISA created NIPR so that NIPR is essentially a VERY secure, single point of contact for all DoD connections to the web. Imagine it as a super firewall for all of the DoD's various branches, partners, and educational institutions that work with the DoD.

Readers may also wish to refer to an <u>earlier page</u> which describes increased NIPR activity on this website.

PARTICULATES REAFFIRMED

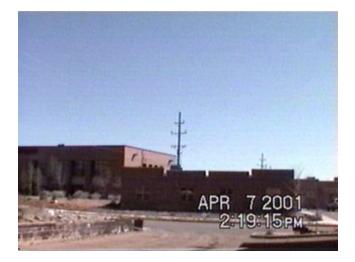
carnicominstitute.org/particulates-reaffirmed/

APR 07 : PARTICULATES REAFFIRMED Clifford E Carnicom April 06 2001

The presence of abundant particulate matter in the atmosphere has again been confirmed by video documentation. These events have, in fact, been repeatedly duplicated since they were first recorded on video and presented on Jan 04 2001. A minimum of six sessions of video have been conducted for this purpose since that date, and each shows the presence of abundant and by all appearances, ionized particulate matter. See <u>previous documentation</u> on this subject. Note also that significant numbers of biological materials were <u>subsequently identified under the microscope</u> within atmospheric samples obtained the following day, April 08 2001.



Visibility in southern Santa Fe area affected by intensive aerosol operations on Apr 04 and Apr 05 2001. These mountains are located approximately 25-40 miles distant from the point of observation.



A 'clear' sky is recorded at the time of documentation of the particulate matter.



The position of the sun with respect to a roof top at the time of the video segment.



Particulate matter as is able to captured on film. Extensive matter exists beyond that recordable on video; size, motion, lighting and magnification are all factors which affect the ability to record the material on film. The largest particles only are visible on these two lower still images. Magnification approx. 40x.



Magnification approx. 40x.

CAUTIONS AGAINST PREMATURE CONCLUSIONS

Carnicominstitute.org/cautions-against-premature-conclusions/



CAUTIONS AGAINST PREMATURE CONCLUSIONS Clifford E Carnicom April 06 2001

It is advised that all researchers, journalists and citizens be cautious against drawing any premature conclusions regarding the specific purposes or agendas of aircraft aerosol operations currently in progress throughout the United States and global regions. It is imperative that any analysis be consistent with all available and observed data, and that no single agenda be declared as an end purpose prior to comprehensive examination. Any efforts to identify specific elements or compounds involved within the operations must satisfy a wide range of criteria and conditions that have been established from the research efforts of numerous individuals.

Some of these criteria and conditions which are expected to be satisfied include the following:

1. Aerosol material size is extremely small, expected to be in the size range from submicron to several microns in size. <u>See previous study</u>.

2. Materials are expected to be hygroscopic, i.e., water loving (e.g., some metallic salt forms), in nature. <u>See previous study</u>.

3. Materials are expected to be ionizable by visible light or near ultra-violet wavelenths. <u>See previous study</u>.

4. Materials are expected to possess a fairly high degree of solubility. <u>See previous</u> <u>study</u>.

5. Materials are expected to be alkaline in nature. See previous study.

6. Particulate aerosol materials are visible under specific lighting conditions. <u>See</u> <u>previous report</u>.

7. Particulate aerosol materials exhibit electrically charged (ionized) motion. <u>See</u> previous report.

8. Electromagnetic energy absorption characteristics of candidate particulate matter must be reviewed as a function of particle size, element type, and wavelength. Expected behavior across the electromagnetic spectrum must be analytically evaluated, including but not limited to radio waves, microwave (e.g., radar), visible, and x-rays wavelengths. Characteristics of absorption of electromagnetic energy within the microwave portion (e.g., radar) of the spectrum may be of particular interest. <u>See previous study</u>.

9. Visible particulate matter must be chemically identified. <u>See previous report</u>.
 10. Spectrometry data indicating the presence of unexpected elements must be considered. <u>See previous study</u>.

11. Relative humidity studies and particulate water absorption characteristics must be considered. <u>See previous study</u>.

12. pH rainfall data results, indicating a significant increase in soluble hydroxides must be incorporated with any analysis. <u>See previous study</u>.

13. Electrolysis examination of rainfall samples must be conducted and provide results that are consistent with an observed increase in alkalinity (increased ionic distribution). <u>See previous report</u>.

14. Fibrous materials, sub-micron in width, repeatedly documented and associated with aircraft aerosol operations must be thoroughly analyzed. The failure of the United States Environmental Agency to acknowledge the certified receipt of said material for testing and identification must be included within that investigation. Biological components later found to exist within those same samples must be professionally evaluated. <u>See previous report</u>.

15. The repeated identification of biological components within numerous atmospheric samples that span both time and geographic separation must be accounted for. Professional examination is a requirement. <u>See previous report</u>.

16. A comprehensive consideration of both electromagnetic and biological aspects with respect to the accumulated observations and data must take place. <u>See previous report</u>.

17. Analytical models that have been developed describing conventional vapor trail formation, distance span and dissipation must be compared to repeated conflicts within observations. See previous studies <u>1,2,3</u>.

18. Health effects that are being reported are to be considered in their totality in

conjunction with their probable causes and sources.

19. The repeated failure of civil, military, and media officials to adequately address the legitimate citizen concerns and calls for formal investigation of widespread and well documented aerosol activities must be accounted for. <u>See previous record</u>.

Each of the above criteria or conditions must be considered prior to any declaration of purpose or agenda that is presumed to fully explain the aircraft aerosol operations in progress. No chemical elements or compounds are beyond examination within the current investigation, and none have been entirely excluded at this time; special attention is being given to certain elements of Groups I and II of the periodic table because they satisfy many of the considerations listed above. More than one type or mode of operation is to be considered as a likelihood. All researchers, journalists, and citizens are urged to explore each of the above issues in detail to reach a comprehensive assessment of the operations underway. In order to serve the broader long term mutual goals of full disclosure and accountability of the events being witnessed, premature statements of composition and purpose will need to be avoided. I will continue to submit an appeal for broad-based participation and investigation by professionals, researchers, journalists, public officials and citizens to address and resolve the urgent and serious claims now before us.

Clifford E Carnicom April 06 2001

BIOLOGICAL STAINS : READILY AVAILABLE

carnicominstitute.org/biological-stains-readily-available/



BIOLOGICAL STAINS : READILY AVAILABLE Clifford E Carnicom April 07 2001

Investigation continues into the unexpected and repeated presence of biological components within numerous atmospheric samples recently collected through the use of HEPA filters and the process of electrostatic precipitation. A portion of this research involves the detection of biological components with the use of varying stains. For those that attempt to discredit the use of iodine stain as a viable stain method in the detection of such components, the following information from the Museum of Science (<u>http://www.mos.org/sln/sem/staining.html</u>) may be of value to all readers and researchers:

"Many samples, particularly cells, can appear quite transparent under the microscope. The internal parts of the cells, the organelles, are so transparent that they are often difficult to see. Biologists have developed a number of stains that help them see the cells and their organelles by adding color to their transparent parts.

While many biological stains are for advanced study only, there are some that are easy to obtain and use. Some readily available stains are: food coloring, iodine, malachite green (ick fish cure), and methylene blue. Food coloring can be found at a grocery store, and iodine can be found at a pharmacy. The last two stains, malachite green and methylene blue, can be purchased at aquarium shops."

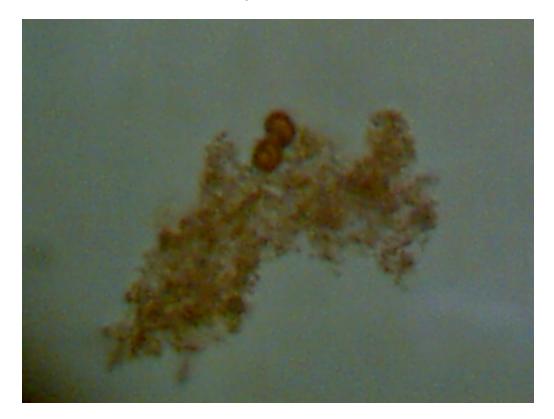
Investigation with all stains mentioned remains in progress. The use of methylene blue is also showing the presence of significant amounts of biological materials within the atmospheric samples under evaluation. Two additional biological stains that should be fairly easy to obtain are eosin and safranine; eosine is one stain that is apparently valuable in blood testing methods. It is recommended that other citizens and researchers combine their efforts and assist with this investgation. The public appeal for independent professional involvement remains in standing.

Clifford E Carnicom April 07 2001

APR 08 2001 : BIOLOGICALS REAFFIRMED

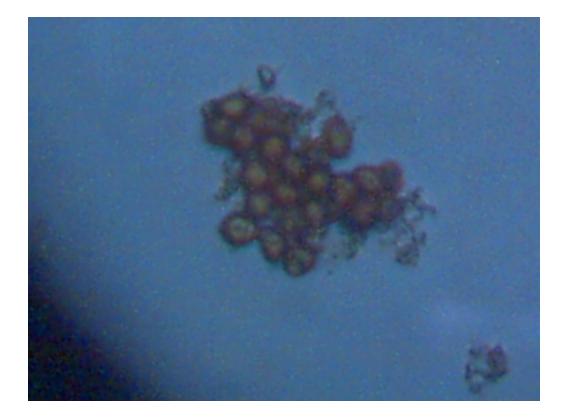
carnicominstitute.org/apr-08-2001-biologicals-reaffirmed/

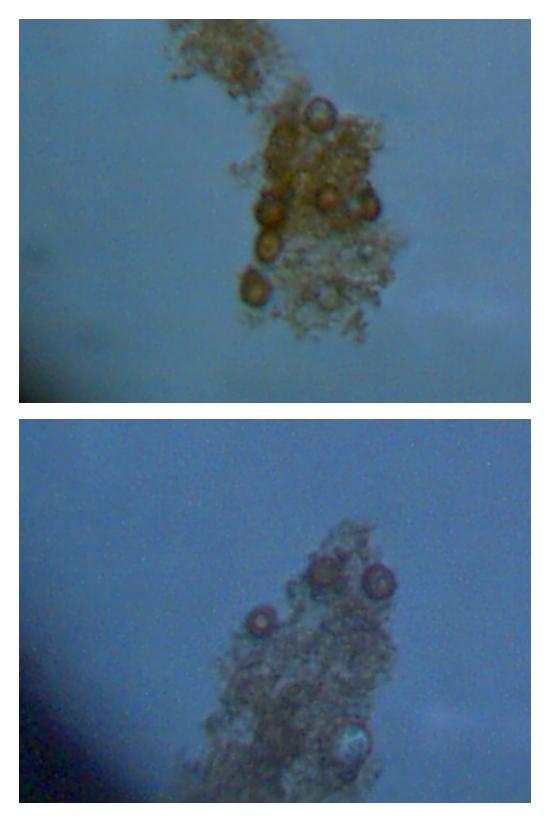
APR 08 2001 : BIOLOGICALS REAFFIRMED Clifford E Carnicom Apr 08 2001



The abundant presence of biological components within an atmospheric sample processed by electrostatic precipitation in Santa Fe, NM on April 08, 2001 is again demonstrated. These biological components occurring within a maxtrix or base material by all appearances again satisfy the visual properties of erythrocytes, or red blood cells. The material presented on this page is identical to that of 4 previous samples also evaluated through the combination of electrostatic precipitation and HEPA filter analysis. The electrostatic precipitator was in operation for approximately 1 1/2 hours in the open air at approximately 4 feet above ground level on the afternoon of Apr 08 2001. Collections devices again were cleaned glass microscope slides. Various stains are under evaluation, however, the matrix material surrounding the cells appears especially receptive to an iodine stain that enhances the contrast for identification and observation. Note again the bi-concave nature visible within several of the cells and the size which again has been measured at 5 microns. Magnification of the images is approximately 2000x. Five of six atmospheric samples that vary with respect to location and time have produced these identical results. Aircraft aerosol operations over Santa Fe, NM were especially active and intense during several days that preceded the collection, with a particular emphasis upon Apr 04 2001. Visibility for several days after Apr 04 was progressively degraded, including the day of this sampling. I have no history of allergic reactions prior to 1999, however, I did experience allergic reactions during this same period of affected visibility. Juniper pollen grains were not identified during this most recent analysis. Filming of ionized particulate matter in the atmosphere has again taken place as adjunct evidence to these events.

An public appeal remains open for the professional independent evaluation of these materials which are consistently and repeatedly being identified within atmospheric samples bridging both time and geographic region. The methods of collection have been freely described, require limited resources and they are accessible to the general public. There exists an ethical and a moral responsibility to the general public for positive identification and testing of the materials which are being found and shown for review. Discourse and speculation are insufficient; positive identification is a requirement.





Clifford E Carnicom Apr 08 2001

CONTRAIL FORMATION MODEL

carnicominstitute.org/contrail-formation-model/



CONTRAIL FORMATION MODEL Clifford E Carnicom Apr 12 2001

A preliminary model has now been developed which can be used to predict whether contrails will form or not under reported meteorological conditions at flight altitude. Analytical models for contrail prediction appear to be difficult to acquire publicly, and this model is therefore offered for investigative purposes. This is an original development that results from a variety of sources and methods, including unclassified aerographic manuals, meteorological theory, least squares analysis and regression analysis. It is to be interpreted as an empirical model, and it is subject to further refinement depending on the results that are obtained from its use.

The model offered is as follows:

c + (.02c - .41)t

RH_{min} = _____

(.003c - .14)

where $c = e^{(151 - alt) / 19.5}$

and t = temperature of the atmosphere at flight altitude in degrees centigrade

and alt = altitude of the jet aircraft in thousands of feet.

RH_{min} is the minimum relative humidity (with respect to water per conventional standard) that is required at flight altitude for contrails to form. The contrails referred to are those classically and conventionally defined as condensation trails, i.e., composed of water vapor. A standard atmospheric model is assumed within the development. The model is intended to be used only within the range of 30,000 to 40,000 ft. MSL. The model is quite sensitive to small changes in temperature, and consequently, any errors in temperature.

Commercial flight traffic usually ranges between 35 and 37 thousand feet MSL. A representative case may be considered, therefore, at approximately 36,000 ft. MSL. Standard temperature at 36,000 ft. MSL is approximately -53.5 deg. centigrade.

This model can and will now be evaluated with actual observations in an effort to test it for reliability. Citizens are welcome to submit their own observations for inclusion if they so desire. The value of this model is to identify those meterological conditions which are supportive of conventional contrail formation. Anomalous persistent contrails and subsequent "cloud" decks that result from frequent aerosol operations can also be examined in conjunction with this model.

Contrail formation/dissipation and cloud formation are to be recognized as two separate physical processes resulting from differing conditions and variables for each. It is important that any analysis of these two processes be appropriately and separately understood before any mutual connection is to be made.

A history of observations is available on the <u>aerosol report page</u>.

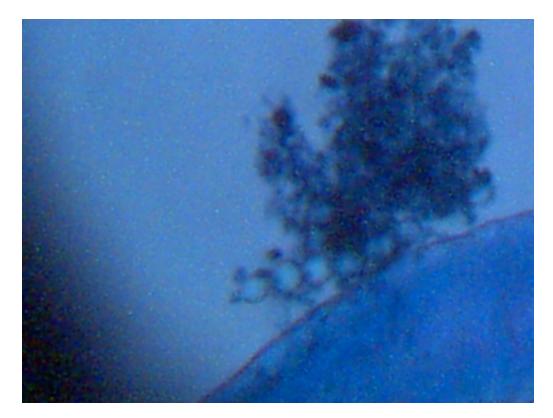
This model is in addition to that <u>previously developed</u> that predicts contrail dissipation times, as well as a model to <u>predict the distance</u> behind the engines that the contrail is expected to form.

The model presented will be modified, revised or further developed as circumstances require.

IDENTIFICATION REQUESTED

carnicominstitute.org/identification-requested/

IDENTIFICATION REQUESTED Clifford E Carnicom Apr 19 2001



Note biological chain structure between edge of a fiber and adjacent matrix material. Approx. 2000x.

Additional biological components have been repeatedly identified within atmospheric samples collected through the process of electrostatic precipitation on April 18 and 19 2001. The precipitator was active approximately one hour in each case. Microscope slides subjected to precipitation were subsequently heat fixed. Methylene blue stain was applied for several minutes, the slide gently rinsed, and then examined under the microscope. The view at the bottom of this set of photographs represents a typical example of the frequently appearing matrix material of irregular shape at approximately 500x. Close examination of this matrix material reveals the frequent presence of clustered or chained groups of cells. The individual cells in this case are measuring at approximately 3- 3.5 microns. As a comparison, a human hair ranges from approximately 60 to 100 microns in thickness. Assistance with positive identification of this material and the replication of sampling methods remains as an

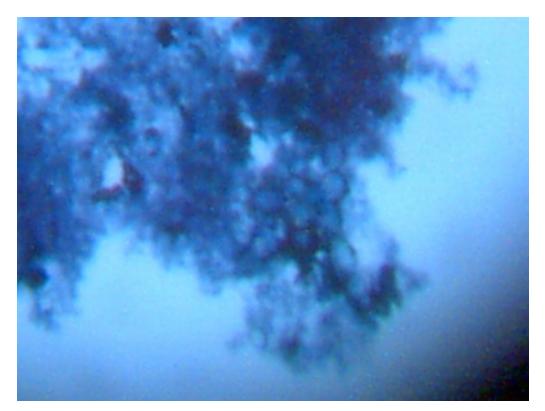
open request. Cocci bacteria, including both streptococci (spherical and chainlike), staphylococci (spherical and clustered) and fungal spores are being considered within the identification process, although the question of size remains an issue. Apparently cocci bacteria commonly range between 0.5 and 5 microns, however, an average size is reported at approximately 0.5 – 1 micron. If this information is accurate, these samples would be at the higher end of the expected range if they are indeed cocci bacterial forms. Any assistance on this matter is appreciated. The matrix materials remain equally important to identify. The frequency, abundance and repetition of the materials observed within any single sample set appears to be highly unusual. The materials readily accept methylene blue stain after heat fixing. The materials shown here do not appear to be visible using the simple iodine stain procedure that has been applied earlier under separate tests. Size, spacial groupings and stain receptiveness indicate that the current materials are distinct and separate. Biological materials that satisfy the visual properties of erythrocytes were not apparent within this sampling. Additional identification methods will continue concomitant with the request for identification assistance.

Numerous small bodies, approximately 1-2 microns in diameter, stain dark blue within the matrix material. The matrix material itself appears to be at the sub-micron level or beneath the resolving power of the microscope being used.

The purpose of this presentation is to request assistance with the identification of the materials that are being shown. Information regarding the norms for bacterial type and amount within atmospheric samples is also of benefit. Professionals in microbiology are invited to participate in the process of identification to adequately address the questions and concerns that have resulted from the observations, testing and research that remain in progress.



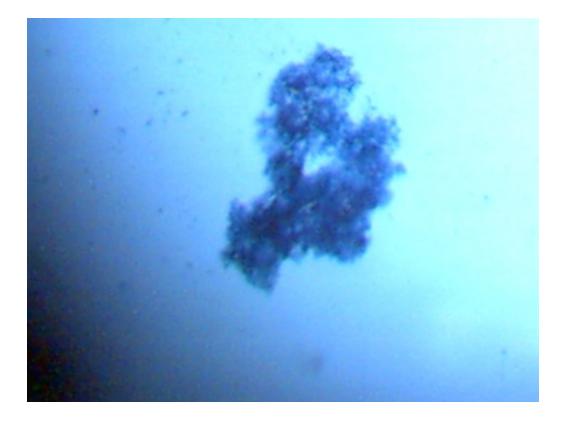
Note biological cluster structure amidst surrounding matrix material. Approx. 2000x



Note biological cluster structure amidst surrounding matrix material. Approx. 2000x



Note 3 biological chain structures; top left, middle and right edge of microphotograph. Matrix material surrounds cellular structures. Approx. 2000x



Overview of matrix material. Clusters or chains of cellular structures frequently contained within. Magnification approx. 500x.

SEARAD – MODTRAN – ABLEX

carnicominstitute.org/searad-modtran-ablex/



SEARAD – MODTRAN – ABLEX Clifford E Carnicom April 20 2001

Researchers may wish to begin investigating the papers presented on the following website representing the International Society for Optical Engineering located at:

http://spie.org

This site has been referred to me by an independent researcher with the following comment, held as anonymous:

"Please take time to look into SEARAD, MODTRAN, and ABLEX. I believe if you research these on www.spie.org you will will find compelling info for chemtrails... Much mention of clouds in coordination with their new Air Borne Laser System... Thats all I can say as I am sure I too am watched for my activity in trying to get to the truth."

Initial research within this site under the keywords mentioned demonstrates significant resources and efforts devoted toward aerosol modeling techniques, including the detection of particulates and biological components. Some papers of interest include:

Hazardous cloud imaging; a new way of using passive IR – Flanagan Statistical models for the desert aerosol size distributions and comparison to MODTRAN modules – Dror Accurate method for prediction of atmospheric transmission according to weather – Dror

Other researchers may wish to begin collecting and assessing the impact of the research programs that are well established and in place. The message board attached to this web site can be used for further dissemination of the information that is acquired. Researchers that are already familiar with these programs may wish to combine their efforts at that location.

My appreciation is extended to the individual for making this reference available for further investigation and evaluation.

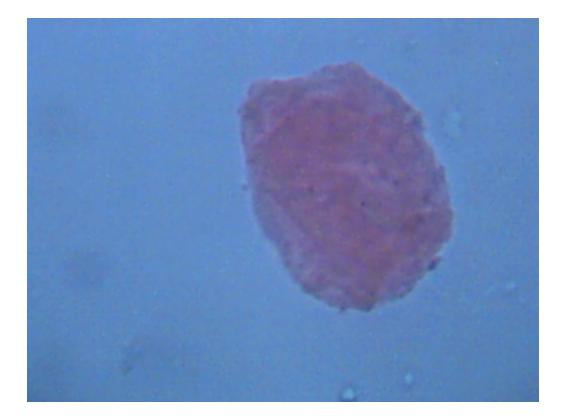
Clifford E Carnicom April 20 2001

EUKARYOTE PRESENCE?

carnicominstitute.org/eukaryote-presence/

EUKARYOTE PRESENCE? Clifford E Carnicom May 02 2001

Electrostatic precipitation air samples analyzed on May 01 2001 and on numerous previous occasions are revealing the repeated presence of what appears to be a eukaryotic, or nucleated cell type. Professional assistance with identification of the materials being shown herein is again openly and fully requested. Previous calls for professional assistance with the identification of biological components repeatedly identified within atmospheric samples, accomplished through electrostatic precipitation as well as with HEPA filters, have remained unheeded. Capability for digital presentation of the imagery remains below that available through optical examination with the microscope. Initial analysis using an oil immersion objective at 1000x indicates the presence of a nucleus and an internal granulated structure; analysis at this level of magnification is preliminary and requires further effort. Motility is not evident. Pollen does not appear to be a viable alternative of identification; familiarity exists with both juniper and pine pollen resident to this area. These findings have been withheld to a point of repetition that now requires identification.



Magnification approx 2000x Size Approx. 30-40microns.

The structures being shown have been repeatedly and consistently identified within numerous air samples that have been collected. The structures shown are stained with eosin, which is readily absorbed. Malachite green dye is also readily absorbed. Heat fixing of the slides upon which the samples are collected appears to destroy the structures. The size of the cells approximates 30 to 40 microns, and they are easily visible with fairly low magnification with the use of eosin stain. Eukaryote cells commonly range from 10 to 100 microns in size. Bacteria commonly range from .5 to 10 microns in size. Viruses commonly range from .04 to .1 microns. It is presumed that the size of the structures should make identification relatively easy by knowledgeable parties. Any revision or corrections to this report will be made as is appropriate.

The following comment on eosin stain is available at :<u>http://www.abbeycolor.com/eosin.htm</u>:

"Eosin is vital in medicine and biological science to show details in cells and microorganisms. It highlights cell granules and nuclei, and mast cells (cells that create other cells). Eosin demonstrates the presence of viruses borne by mosquitoes, or early necrobiotic changes. It is used to characterize tissue cells, protozoans and bacteria. Eosin's most important medical uses are in blood and bone-marrow testing."

In addition, from http://www.cba.arizona.edu/Histo/stains.html:

"H&E (hematoxylin and eosin): H&E is the most commonly requested histologic stain. The Gill's hematoxylin/eosin Y technique stains nuclei blue and cytoplasm, muscle and connective tissue pink to red."

Professional identification of the structures shown is of paramount importance to the general public.

It may be of interest to make known, according to *Microbiology*, Torra, 2001 that viruses must be grown in living host cells. This reference also states that animal viruses are cultured using three primary methods : 1. The use of living animals. 2. embryonated eggs 3. cell cultures.

Macrophages are one cell type under investigation.

Further assistance is required to resolve the questions that are being raised from this finding, and it is appreciated. Duplication of methods of testing and analysis is encouraged. Any further information provided will be incorporated into this report.



Magnification approx 480x Size Approx. 40microns.

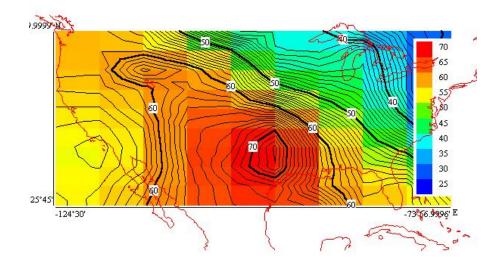


Cluster of cellular structures. Most cells appear individually; clusters are occasionally found. Magnification approx 480x Individual Cell Size Approx. 30-40microns.

THE AEROSOL REPORTS: UNITED STATES

carnicominstitute.org/the-aerosol-reports-united-states/

THE AEROSOL REPORTS: UNITED STATES A Model Under Development Clifford E Carnicom Probability of Favorable Aerosol Conditions: 100 : Favorable 0 : Unfavorable



Date:	Northwest US Seattle WA	South US Ft. Worth TX	North US Minneapolis MN	East US Brookhaven NY	West US San Diego CA	Southeast US Miami FL	Southwest US Santa Fe NM	Reports of HeavyOperations CT:ChemtrailTrackingUSA Calendar or Board
0531	59	73	41	28	54	58	65	NM
0529	44	75	21	31	56	83	71	CT: TX, 0530: LA,TN
0527	38	58	26	57	75	91	64	CT:0526-FL,LA, 0527-NM in a.m.
0525	29	29	37	47	51	90	58	FL
0524	75	29	58	45	53	76	63	OR, WA.
0523	71	31	66	80	55	80	52	CT:OR.
0522	61	34	60	87	61	66	50	CT:0520-FL,MI,CT 0520- FL,0522-MD

24	47	77	61	76	37	80	
43	39	75	32	88	39	65	CO-Aspen
89	51	43	50	68	55	78	
73	67	35	59	47	68	87	0513-NM 0514-NM,OH,VA
56	51	19	49	60	52	68	NM,WA
45	42	18	20	58	58	43	OR,TX
35	48	26	34	42	63	34	FL
50	27	32	53	44	72	35	FL
51	39	41	29	44	67	44	CT:OR,FL, VA
51	54	38	20	37	65	63	CT:OR,VA
40	65	42	33	39	_	60	CT:OR/VA
27	84	46	55	50	_	50	
23	88	41	53	47	_	43	
34	67	49	38	43	_	36	CT:OR
46	43	55	28	49	_	46	СТ"ТХ
55	40	47	25	50	_	53	NM
67	49	37	25	51	_	53	CT:TX
64	43	25	23	56	_	70	NM
43	28	22	23	64	_	73	
25	19	28	27	65	_	61	NM
22	18	31	46	65	_	51	
26	21	33	81	64	_	36	CT:OR
43	34	42	88	60	_	25	VA
71	55	50	58	61	_	19	NM/VA
	43 89 73 56 45 35 50 51 51 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 27 23 34 40 25 67 67 64 43 25 67 64 43 25 67 67 64 43 25 67 64 43 25 67 64 43 25 67 64 43 25 67 64 43 25 22 26 23 23 24 25 67 64 43 25 26 67 64 43 25 26 67 64 43 25 26 67 64 43 25 26 26 26 26 27 23 26 43 25 26 26 26 26 27 23 26 27 23 23 25 26 26 27 26 27 23 26 27 26 27 27 23 26 27 26 27 26 27 27 27 27 27 27 27 27 27 27	43 39 89 51 73 67 56 51 45 42 35 48 50 27 51 39 51 39 51 48 50 27 51 54 40 65 27 84 23 88 34 67 46 43 55 40 67 49 64 43 23 28 243 28 25 19 22 18 26 21 43 34	43 39 75 89 51 43 73 67 35 56 51 19 45 42 18 35 48 26 50 27 32 51 39 41 51 54 38 40 65 42 27 84 46 23 88 41 34 67 49 46 43 55 55 40 47 67 49 37 64 43 25 43 28 22 43 28 22 18 31 31 26 21 33	43 39 75 32 89 51 43 50 73 67 35 59 56 51 19 49 45 42 18 20 35 48 26 34 50 27 32 53 51 39 41 29 51 39 41 29 51 54 38 20 40 65 42 33 27 84 46 55 23 88 41 53 46 43 55 28 55 40 47 25 67 49 37 25 64 43 25 23 43 28 22 23 43 28 22 23 25 19 28 27 24 33 81<	43 39 75 32 88 89 51 43 50 68 73 67 35 59 47 56 51 19 49 60 45 42 18 20 58 35 48 26 34 42 50 27 32 53 44 51 39 41 29 44 51 39 41 29 44 51 54 38 20 37 40 65 42 33 39 27 84 46 55 50 23 88 41 53 47 34 67 49 38 43 46 43 55 28 49 55 40 47 25 50 67 49 37 25 50	1 1 1 1 1 43 39 75 32 88 39 89 51 43 50 68 55 73 67 35 59 47 68 56 51 19 49 60 52 45 42 18 20 58 58 35 48 26 34 42 63 50 27 32 53 44 72 51 39 41 29 44 67 51 54 38 20 37 65 40 65 42 33 39 23 88 41 53 47 - 34 67 49 38 43 - 55 40 47 25 50 - 67 49 37 25 51 - <td>Image: Constraint of the section of the sec</td>	Image: Constraint of the section of the sec

042	63	48	41	61	_	16	CT:TX/VA

This work will also be cross-referenced with data available through the efforts of the many citizens at Chemtrail Tracking USA.

Identification of major failures within the model are especially important; please do not hesitate in this regard. The work is currently based upon extremely limited data sets. It must be understood that the model does not attempt to predict whether or not aerosol operations actually take place; only that the atmospheric conditions are favorable or unfavorable for the operations.

This work and the inclusion of any other geographic regions will be provided as time and circumstances permit. There is no assurance that I will have the time available to continue this work, but an attempt shall be made.

Readers may wish to interpolate between geographic locations as desired.

This report is offered for tentative and investigative purposes only to the general public, and no guarantees of reliability are stated or implied.

This report is based upon recent research that is attempting to model the conditions that are favorable or unfavorable to aerosol operations. This model and research is to be considered as preliminary, and it will be modified as necessary according to further findings and analysis.

Clifford E Carnicom Original Posting May 02 2001

ERYTHROCYTES: POSITIVE VISUAL IDENTIFICATION

Carnicominstitute.org/erythrocytes-positive-visual-identification/

ERYTHROCYTES: POSITIVE VISUAL IDENTIFICATION Clifford E Carnicom May 03 2001

Positive visual identification of erythrocytes, or red blood cells, is now apparent from the microphotographs which are presented on this page. The samples shown are taken from atmospheric testing in Santa Fe, NM using the methods of electrostatic precipitation as described earlier.

The bi-concave surfaces, circular shapes, and dimensions of the structures shown are an indisputable match with that of erythrocytes. Professionals, citizens, activists and researchers are requested to conduct these tests independently for verification or refutation of what has been repeatedly presented through recent atmospheric analysis.

The magnification achieved on this most recent analysis makes the case quite clearly that biological components are now a regular feature of the atmosphere that we all breathe. This is in addition to the saturated level of particulate matter that has been documented at an equal level of veracity, along with the obvious degradation in visibility that is now all too apparent. Crimes of the highest order are being perpetrated on the citizens without their knowledge or consent. The citizens of this country must confront this issue in a public and vocal forum with urgency.

Any positive refutation of the results shown on this page by any responsible party will be immediately presented. Any refutation will require a duplication of the collection and analysis methods that have been employed. Sincere and genuine efforts to examine these findings in an honest fashion is invited and encouraged.



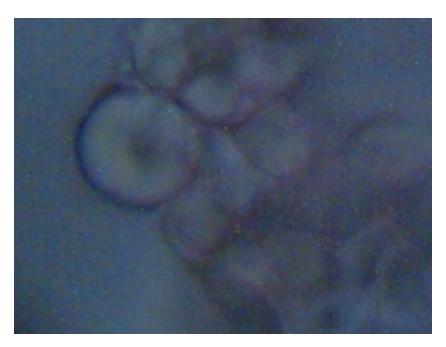
Magnification approx. 5000x Bi-concavity characteristic of erythrocytes readily visible.



Magnification approx. 5000x Bi-concavity characteristic of erythrocytes readily visible.



Magnification approx. 5000x Bi-concavity characteristic of erythrocytes readily visible.



Magnification approx. 5000x Bi-concavity characteristic of erythrocytes readily visible.

Specifics of collection in this case are as follows:

Samples are collected by electrostatic precipitation as described earlier. Air volume also exposed to a humidifier during processing to enhance aggregation. Samples collected on clean microscope slides. Wet mount slides using eosin stain prepared prior to digital image collection. Dessication appears to remain a viable consideration, as some cells appeared to reconstitute to a degree from the eosin stain. Degradation of the cell structure appears to occur over extended exposure to this particular stain. Images viewed with an immersion oil objective at 1000x, and joined with a digital coupler to achieve a magnification of approximately 5000x. Results are in complete agreement and concordance with previous analyses at lower levels of magnification using both electrostatic precipitation and HEPA filter techniques. Size of the cells measure from 4 to 7 microns.

Any corrections or revisions to the information presented here will be made as is appropriate.

Clifford E Carnicom May 03 2001

SF AEROSOL REPORT

carnicominstitute.org/the-aerosol-report/

THE AEROSOL REPORT Clifford E Carnicom

This information will now be integrated within the US report page. Please refer to that page.

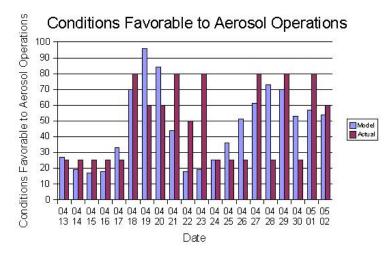
CE Carnicom 05/04/01

Date of Report : Wed May 03 2001 Time of Report : 0900 Mountain Daylight Time Location: Santa Fe NM

The probability, based upon current investigative modeling, that conditions in the southwestern United States (Albuquerque-Santa Fe) are favorable to aerosol operations is now estimated at 29%.

This report is offered for investigative purposes only to the general public, and no guarantees of reliability are stated or implied. It will be provided as circumstances permit. Using the observational history table below in conjunction with this graph, please note the association with increased moisture content and precipitation that is often evident.

A graph of the recent probability history for this same area is as follows:



Actual results are reported according to the following arbitraryranking system of observations reported below:

Vapor Trails Only	25
Mixed Vapor and Aerosol	60
Heavy Aerosol Operations	80
Full Cloud Cover – No Visibility	50

OBSERVATIONAL HISTORY TABLE

Date	Location	Weather ReportTime (UTC)/ Observation Time (Local)	Altitude /Temp /DewPoint	Required Relative Humidity from Model RH _{min}	Actual Relative Humidity %	Does Model Predict Vapor Trail Formation at Report/ Observation Time?	Are Vapor Trails Visible in the Sky at Report/ Observation Time?	Weather	Notes
041201	ABQ/ Santa Fe	1200 0900	34K/ -48.7/ -60.7	28	28	Marginal	NO	Partly Cloudy- Cumulus	No Traffic Visible
041301	ABQ/ Santa Fe	1200/ 0900	34.6K/ -51.7/ -64.7	8	19	YES	YES-Vapor	Clear	Light Traffic
041401	ABQ/ Santa Fe	1200/ 0900	36.3K/ -55.7/ -67.7	0	20	YES	YES-Vapor	Clear	Light Traffic
041501	ABQ/ Santa Fe	2400/ 1600	37.1K/ -61.3/ -71.3	0	25	YES	YES-Vapor	Clear	Light Traffic
041601	ABQ/ Santa Fe	1200/ 0900	36.5K/ -55.3/ -65.8	0	25	YES	YES-Vapor	Clear	Light Traffic
041701	ABQ/ Santa Fe	1200/ 1300	37.3K/ -58.1/ -69.1	0	22	YES	YES-Vapor	Clear	Light Traffic
041801	ABQ/ Santa Fe	1200/ 0900	36.3K/ -51.6/ -56.6	10	54	YES	Heavy aerosol activities 0830-0930	Clear in AM; Hazy PM	Numerous passes not shown on Flight Explorer- Heavy Traffic/ Vapor trails appearing at 41K- Light Traffic
041901	ABQ/ Santa Fe	1200/ 1000	35.1K/ -50.3/ -56.3	18	48	YES	Mixed aerosol and vapor	Mostly Cloudy in AM/Cumulostratus/ Afternoon clearing	Medium Traffic
042001	ABQ/ Santa Fe	1200/ 1000	34.7K/ -50.7/ -55.4	15	57	YES	Mixed aerosol and vapor	Cumulostratus early AM/Cumulus Late AM	Light Traffic
042101	ABQ/ Santa Fe	1200/ 0900	34.6K/ -52.7/ -60.7	0	38	YES	Vapor in AM/ Heavy Aerosol Activities in PM	Clear in AM/ Increasing Cumulus and Haze Mix in PM	Light Traffic AM/ Heavy Traffic PM
0422	ABQ/ Santa Fe	1200/ 0900	33.8K/ -43.3/ -60.3	67	35	NO	No visibility	Full Cloud Cover- Stratus/ Snow	No Traffic Visible

0423	ABQ/ Santa Fe	1200/ 0900	35.5K/ -53.9/ -62.9	0	32	YES	YES-Vapor- Early AM Heavy Aerosol Activities in Late AM- Haze/ Vapor Trails in PM	Clear Skies AM/ Hazy Skies Late AM/ Cumulus and Clearing again in PM	Light Traffic Early AM/ Heavy Traffic Late AM/ Lite Traffic PM
0424	ABQ/ Santa Fe	1200/ 0900	34.9K/ -54.1/ -65.1	0	24	YES	YES-vapor	Clear	Light Traffic
0425	ABQ/ Santa Fe	1200/ 1000	35.1K/ -52.7/ -60.7	1	37	YES	YES-vapor	Clear	Light Traffic
0426	ABQ/ Santa Fe	1200/ 0900	35.0K/ -51.5/ -61.5	10	29	YES	YES-vapor	Heavy Haze to West at Ground Level, Significant Visibility Reduction/ AM:Increasing Alto-Cumulus/ PM:Cumulus Clouds – Unnatural Feathered Form	Light Traffic
0427	ABQ/ Santa Fe	1200/ 0900	35.0K/ -51.7/ -58.7	8	42	YES	YES-vapor trails in AM Heavy aerosol operations 1130-1300	Mostly Clear in AM-some cumulus clouds/Increasing Cumulus Clouds in Afternoon, Heavy Aerosol Activity 1130-1300 Heavy Rain in Afternoon and Night	Med Traffic in AM/ Heavy Traffic 1130-1300 No visibility from cloud cover in PM
0428	ABQ/ Santa Fe	1200/ 0900	34.9K/ -50.1/ -63.1	19	20	Marginal	YES	Vapor Trails AM/ Mostly Clear AM/ Increasing Cumulus Clouds/	Light Traffic AM Heavy Traffic Late AM
0429	ABQ/ Los Alamos	1200/ 0900	35.0K/ -50.5/ -56.5	17	48	YES	Extremely Heavy Aerosol Traffic Dominated Skies All Day	Extremely Heavy Aerosol Traffic: 100+trails from 0900-1130/ Some Cumulus Clouds in AM/ Heavy Haze from Aerosol Activity at Flight Altitude Merged with Heavy Cumulus Cloud Cover in PM	Heavy Traffic
0430	ABQ/ Santa Fe	1200/ 0900	34.9K/ -52.1/ -66.1	5	16	YES	YES-Vapor	Clear AM with white haze cast to sky	Light Traffic

0501	ABQ /Santa Fe	1200/ 0900	35.2K/ -49.9/ -61.9	21	22	Marginal	YES- occasional vapor trail Extremely Heavy Aerosol Traffic 0830- 1000 60+Trails	Extremely Heavy Aerosol Traffic in AM/ Heavy Haze at Ground Level and Flight Altitude/Clear skies in PM; insufficient moisture for cloud base	Heavy Aerosol Traffic in AM/ Light Vapor Trail Traffic Throughout Day/ Numerous passes not shown on Flight Explorer in AM
0502	ABQ/ Santa Fe	1200 /0900	34.9K/ -51.5/ -63.5	9	22	YES	Mixed Aerosol and Vapor	High Clouds and Haze in AM; Increasing Clouds in PM Cumulo-Stratus by Late Afternoon	Moderate Traffic
0503	ABQ/ Santa Fe	1200/ 0900	34.5K/ -54.1/ -64.1	0	28	YES	Vapor	Cumulus and Haze	Light Traffic
0504	ABQ/ Santa Fe	1200/ 0900	34.5K/ -51.9/ -58.9	6	42	YES	No Visibility	Full Cloud Cover/ Some Rain	
0507				10	33	YES	Vapor	Clear Occasional Cumulus	Light Traffic

This report is based upon recent research that is attempting to model the conditions that are favorable or unfavorable to aerosol operations. This model and research is to be considered as preliminary, and it will be modified as necessary according to further findings and analysis.

A QUOTE RECEIVED

carnicominstitute.org/a-quote-received/



A QUOTE RECEIVED Posted by Clifford E Carnicom on behalf of a wise sender.. May 04 2001

The ultimate authority...resides in the people alone.

James Madison

THE RH DECEPTION

carnicominstitute.org/the-rh-deception/



THE RH DECEPTION Clifford E Carnicom May 21 2001

THE RH DECEPTION

Much ambiguity has been circulated regarding the effect of humidity upon the persistence of contrails, or vapor trails. Numerous sources, without exception, state that such vapor trails (composed of water vapor by historical and conventional definition) may persist for "extended periods" under conditions of "higher" relative humidity. Unfortunately, it is apparent that quantitative information attached to these repeated generalizations is lacking. Even the recently issued "fact sheet" under distribution by a combination of federal agencies, including the EPA, NOAA, the FAA and NASA falls victim to this same deficiency.

Observations by this researcher as well as countless citizens of the country for the past 2 1/2 years have revealed the glaring inconsistencies of the official positions and statements made in contrast to the physical reality of a tragically altered atmosphere resulting from the aircraft operations under examination. These records have been most dramatically illustrated in the arid high desert regions of the southwestern United States, where the physical contradictions with the proffered official positions are at the level of absurdity.

The presentation made herein will demonstrate a realistic, and I might add, quantitative assessment of the expected effect of humidity upon what we all now witness on a day to day basis. The foundation of this argument will rest on what can be called a "Relative Humidity Thought Experiment", which seeks to establish a realistic model upon which to base any quantitative examination. This work can be compared at a later point with a rather interesting discussion and dialogue between a curious citizen and three scientists from the United States Department of Energy on this same topic. That discussion follows at the end of this report.

Let us begin by imagining one of two extreme situations at either end of the relative humidity scale. To start, imagine you are in the middle of a fog bank, and an aircraft whizzes by your face leaving the most dense vapor trail (composed of water vapor, of course) possible from the exhaust emissions. Let us assume that we hold the temperature constant for these experiments. The question is, would that trail evaporate? Would it dissipate? The expected answer must be no. Although the visible vapors would eventually mix with the surrounding fog bank, they would not change form. This leads us to conclude that if the atmosphere was at a pre-existing level of saturation (i.e., 100% relative humidity), a vapor trail would not be expected to dissipate or evaporate, although it would continue to mix with the surrounding environment.

Now examine the opposite end of the spectrum. Imagine you are in the desert, the driest desert possible, and the air around you has absolutely no moisture within it (i.e., 0% humidity). The same aircraft zooms by your face, and leaves you with the same question, will the trail evaporate or dissipate? The answer this time must opposingly be yes, and it must dissipate at the maximum rate that is possible for the given temperature. So with the desert, a maximum rate of evaporation is achieved, and for the fog bank an evaporation rate of zero is earned. To assign a sense of scale to this problem, let us call the maximum attainable rate of evaporation as 1 and the rate of zero evaporation as, well, zero.

It is now time to introduce the model. First, it shall be done narratively, and secondly, within the world of mathematics. The conceptual basis for the model is as follows:

The rate of evaporation is inversely proportional to the humidity itself.

This is the fundamental premise of this work which must be examined with a fair degree of thought. Conceptually, this premise states what has just previously been reviewed. It states that the greater the level of relative humidity that exists within the atmosphere, the slower the rate of evaporation of moisture within it. Conversely, the lower the level of moisture within the atmosphere, the greater the rate of evaporation. Both of these tenets are fundamentally sound, as is demonstrated through the thought experiment described earlier. It will be of interest to scrutinize the mildly variable Department of Energy – Argonne Laboratory responses stated at the end of this report which, incidentally, have provoked this inquiry.

We must now convert the conceptual formulation into a statement of mathematics to achieve any quantifiable results. It is as follows:

E = (1 / k) * RH + C

In this equation, E represents the rate of evaporation, and RH represents the relative humidity itself, and it will be expressed as a decimal value (100% = 1.0; 0% = 0.0). C represents an arbitrary constant, and k represents a proportionality constant.

For those with an interest, this equation results from the differential equation:

dE = (1 / k) * dRH

where dE represents the instantaneous change in the evaporation rate and dRH represents the instantaneous change in relative humidity.

This equation is an ordinary, first order and separable differential equation. It can therefore be readily solved through integration of both sides of the equation. This leads to the general solution given above.

We now need to solve for k and C. This can be accomplished with the initial conditions that we have already discussed within the thought experiment.

The first case is that when RH = 0, E = 1. Therefore, 1 = 0 + Cor C = 1 The second case is then when RH = 1, E = 0. Therefore, 0 = (1 / K) * (1) + 1or 0 = (1 / K) + 1or K = -1

Therefore our specific and final solution is:

E = 1 – RH

Non-linear model extensions of the current discussion have also been considered, with no real impact on the final conclusions that result from this work.

It is now of much interest to examine the results of using this equation under the range of circumstances that can be expected in the real world. The results are somewhat enlightening, especially with respect to the abundant generalizations that have been included within the many official responses to citizen inquiries regarding the aerosol operations.

Here is a tabulation of the results, where the relative humidity will now be expressed as a percentage for convenience sake. Recall that a rate of evaporation of 1 means that maximum evaporation will occur at the given temperature, and zero evaporation means that no evaporation will take place (i.e., hydrostatic stability has been achieved).

Relative Humidity(%)	Rate of Evaporation
0	1.0
10	.90
20	.80
30	.70
40	.60
50	.50
60	.40
70	.30
80	.20
90	.10
100	0.0

We can also translate these results into a tabulation of a "persistence factor", i.e., if the rate of evaporation is zero, the vapor trail is expected to persist indefinitely (disregarding any mixing of mediums within the environment). Therefore the reciprocal of the rate of evaporation leads to this factor of "persistence" under the circumstances considered.

Relative Humidity(%)	'Persistence' Factor
0	1.00
10	1.11
20	1.25
30	1.43
40	1.67
50	2.00
60	2.50
70	3.33
80	5.00
90	10.00
100	Infinity

This means for example, if a vapor trail under conditions of 0% humidity was, hypothetically, to last for 10 seconds and the relative humidity was instantaneously increased to 50%, the trail would be expected to persist for approximately 20 seconds (2.00 *10sec) instead. More realistically, if the relative humidity was 30% and a vapor trail was to last, hypothetically, for 15 seconds, and the relative humidity was suddenly increased to 60% (a reasonably high value under commercial flight conditions), the trail would be expected to last approximately 26 seconds ((2.50 /1.43) * 15secs.).

This formulation and the results now reveal some rather enlightening conclusions. Before embarking further, it is worthwhile to mention that the upper atmosphere at flight levels may generally considered as a relatively arid environment. It is not uncommon, as countless examinations throughout the previous two years plus have disclosed, for the relative humidity at flight altitude to range between 10 and 60 percent. This should not be surprising in any particular way, since it is easily established that most cloud layers form at lower altitudes where the moisture levels commonly exceed relative humidity levels of 70%. This is not the case for upper regions of the atmosphere, which is the favored domain of jet aircraft traffic. As a case in point, during congressional hearings regarding the environmental effects of projected supersonic flight traffic at 65,000 ft., the expert testimony explained that "persistent contrails" would not be a factor as the relative humidity at that level commonly is approximately 5%. My own computations and analysis of radiosonde observations as well as those of those of the witness in this case are in complete concordance. It is fair to state that the upper atmospheric regions are generally more arid than the lower counterparts, with relative humidity levels commonly within the range that has been stated. Extreme upper levels of relative humidity within the flight corridor region are uncommon, and again are in complete agreement with our common sense observations. It is interesting to note that one study involving persistent contrails by NASA focussed on a SINGLE persistent contrail under conditions of uncharacterisically high relative humidity. The examination of relative humidity data (reported with respect to water vapor per conventional standard) in a quantitative sense is now required for anyone that wishes to justify the existence of so-called "persistent" vapor trails on a regular basis. This is the epitome of requirements if the area under consideration is the arid southwestern desert of this country, where this work has been developed.

It may be recalled that an <u>earlier study</u> assessed the expected times for contrail, or vapor trail dissipation. The results of that model are in complete agreement with the observation, common sense and experience base that has accumulated during the last 50 years, i.e., vapor trails routinely dissipate within a matter of seconds, and the extreme range extends at most to a couple of minutes under usual conditions. That particular model was developed independently of any effects from relative humidity, and it is a function of the particle size, the surrounding temperature and the amount of energy placed into the system via solar radiation.

If we now wish to develop the model further, and include the expected effects from relative humidity, we learn that the model is not affected significantly by any commonly encountered levels of humidity at those upper altitudes.

Even at a relative humidity level of 70%, which must be considered quite high for the commercial flight domain, a factor of 3.3 against the maximum evaporation rate of a completely arid environment must be considered as relatively minor. Most of us would

have a difficult case of making the argument of a persistent vapor trail within a moisture-free environment, and more realistically we would expect dissipation within a matter of seconds (disregarding deliberate aerosol injections). To multiply a few seconds by a factor of 3.3 leads to no real world change in the situation at hand.

One of the accomplishments from this most current analysis is that generalized statements regarding the effect of humidity upon the duration of vapor trails can no longer be accepted without further definition. It can be seen that the effects of humidity upon vapor trail evaporation rates are generally insignificant and minor within the historical reference frame of human experience, physics, chemistry, meteorology and common sense observation. To offer any extraordinary and exceptional circumstances to the American public as an explanation for the events now witnessed on a regular basis is deceptive, disingenuous and a prevarication. It is important that the citizenry educate themselves on the facts and physics of the world around themselves to serve the purpose of establishing the truthfullness of that which the public is subjected to without their consent.

That truth now includes overwhelming evidence that the populace has been systematically subjected to a covert, extensive and sustained project of aircraft aerosol dissemination without their consent. Biological components repeatedly identified within atmospheric samples during that same time period remain equally distressing and disturbing. Let it be reiterated that the United States Environmental Protection Agency remains in possession of one of those samples referred to, and to date refuses to acknowledge the existence of that sample or to disclose the results of any testing.

The need for accountability, disclosure and Congressional hearings to serve the rights of the people of this nation and the world remains paramount.

Clifford E Carnicom Authored at Rio Chama May 19 2001

UNITED STATES DEPARTMENT OF ENERGY ARGONNE NATIONAL LABORATORIES EVAPORATION AND HUMIDITY ASK A SCIENTIST – WEATHER ARCHIVE INQUIRY AND DISCUSSION

AIR FORCE INCREASES RANK OF LIE

carnicominstitute.org/air-force-increases-rank-of-lie/



AIR FORCE INCREASES RANK OF LIE This letter authored by Walter M. Washabaugh, Colonel, USAF This document received by email on May 22 2001 Posted by Clifford E Carnicom May 22 2001

"hoax (n.)- An act intended to deceive or trick."
"lie (n) – 1. A false statement deliberately presented as true.
(v) 2. To convey a false image or impression."
The American Heritage Dictionary, 3rd Edition, 1994.

Dear Clifford,

Below is Sen. Feinstein's cover letter and the attached letter to her from Col. Walter M. Washabaugh.

May 16, 2001

Dear Mr. Moors

With reference to your inquiry concerning "chemtrails", I have received a response from the Department of the Air Force which I am enclosing. I hope that the response is helpful, and that the information it contains will clarify the situation for you. If you have further questions, or if my office can assist you with any other federal matters, please do not hesitate to call on me again.

Once again, thank you for contacting me.

With warmest personal regards.

Sincerely,

Dianne Feinstein

The attached letter is on DEPARTMENT OF THE AIR FORCE letterhead with the seal of "Office of the Secretary" in the left margin.

4/20/01

Dear Senator Feinstein,

This responds to your inquiry for Mr. Rick Moors concerning "chemtrails."

The term "chemtrail" is a hoax that began circulating approximately three years ago which asserts the government is involved in a joint federal program of covert spraying of the public. The "chemtrails" are most often described as "unusual contrail or contrail patterns" seen coming from military and civilian aircraft. The "chemtrail" hoax has been investigated and refuted by many established and accredited universities, scientific organizations and major media publications

There has been an increase in the number of contrails observed due to the significant civil aviation growth in the past decade, and the patterns observed are directly correlated to the grid pattern formed by aircraft flying north/south and east/west routes designated by the Federal Aviation Administration (FAA). The FAA manages the National Airspace System (NAS) and controls both civilian and military aircraft using the NAS. The National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) are the agencies charged with conducting atmospheric and climate experiments and are investigating the effects of contrail formation and dissipation on the climate. Aircraft and their engines can produce a variety of condensation patterns ("contrails"), exhaust plumes, and vapor trails. Furthermore, the Air Force performs missions during which, exhaust is released into the atmosphere. The exhaust emissions produced by aircraft and space launch vehicles can produce contrails that look very similar to clouds which can last for only a few seconds or as long as several hours. Vapor trails are formed only under certain atmospheric conditions and create a visible atmospheric wake similar to a boat propeller in water and usually dissipate very rapidly.

Contrails consist ofice particles that form or nucleate around the small soot or aerosol particles in the exhaust hases. The contrails are formed when the relative humidity increases because of the mixing of warm and moist exhaust gas with colder and less humid ambient air of the atmosphere. Contrails become visible roughly about a wingspan distance behind the aircraft. Contrails can be formed by propeller or jet turbine powered aircraft.

The contrails formed by the exhaust at high altitude are typically whicte and very similar to cirrus clouds. As the exhaust gases expand and mix with the atmosphere, the contrails diffuses and spreads. At sunsets, these contrails can be visibly eye-catching and striking as they reflect the blue, yellow and red spectrum of the reflected sunlight. Due to horizontal wind shear and a (comment – sentence ends here, and does not continue on the second page).

P.2

A different type of contrail or condensation trail is caused when a wing surface or winglet causes a cavitation of iar in very humid conditions. This results in a unique vapor trail that is not formed due to exhaust gases.

Aerial spraying for pest or weed control and fire suppression is the only Air Force activities that involve aircraft intentionally spraying chemical compounds (insecticides, herbicides, fire retardants, oil dispersants). The only unit in the Air Force capable of aerial spray operations to control disease-carrying pests and insects is the Air Force Reserve Command's (AFRC) 910th Airlift Wing, Youngstown – Warren Air Reserve Station, Ohio. The aerial spray mission uses four specially configured C-130 Hercules turboprop iarcraft. Aerial spraying enables large parcels of land or water to be treated safely, quickly, accurately, and cheaply. This is the only fixed wing aerial-spray capability in the Department of Defense. Although the Department of Defense initiates most of the unit's missions, its services are also requested by local, state, and other federal agencies and coordinated with the Center for Disease Control. The most common missions flown are for mosquito, sand flea and weed control. Several states have also requested support to combat grasshoppers and locusts.

For a number of years commercial companies have been involved in cloud seeding and fire supression measures. Cloud seeding requires the release of chemicals in the atmosphere in an effort to have water crystals attach themselves and become heavy enough to produce rain. The Air Force does not have a cloud seeding capability. The Air Force's policy is to observe and forecast the weather to suport military operations. The Air Force is not conducting any weather modification experiments or programs and has no plans to do so in the future.

In short, there is no such thing as a "chemtrail" -the actual contrails are safe and are a natural phenomenon. They pose no health hazard of any kind. We thank you for this opportunity to address your concerns and trust you find this information helpful.

Sincerely,

WALTER M. WASHABAUGH, Colonel, USAF Chief, Congressional Inquiry Division Office of Legislative Liason

ERYTHROCYTES: MAY 22

carnicominstitute.org/erythrocytes-may-22/

ERYTHROCYTES: MAY 22 Clifford E Carnicom May 22 2001

Positive visual identification of erythrocytes, or red blood cells, has again taken place from atmospheric samples collected in Santa Fe NM on May 22 2001. The method of electrostatic precipitation has again been used. Extensive counts of clusters of cells and the surrounding matrix material which readily absorbs an iodine stain were found on the microscope slides analyzed. The atmospheric samples were subjected to both sound and vapor fields to increase aggregation, in addition to exposure to the high voltage, low current electrical field.

The bi-concave surfaces, circular shapes, and dimensions of the structures again clearly identify the structures shown as erythrocytes. Measurements taken again show the size of the cells as approximately 6 microns. This represents a total of 7 out of 8 tests that have shown themselves to be a positive visual identification of erythrocyte characteristics. Both electrostatic precipitation and HEPA direct filtering techniques have been repeatedly used with identical results.

Magnification of the images shown below is approximately 5000x, obtained with the use of an oil immersion objective in combination with a digital coupler.



Magnification approx. 5000x Bi-concavity characteristic of erythrocytes readily visible.



Magnification approx. 5000x Bi-concavity characteristic of erythrocytes readily visible.

Clifford E Carnicom May 22 2001

THE BARIUM DEDUCTION

carnicominstitute.org/the-barium-deduction/



THE BARIUM DEDUCTION Clifford E Carnicom May 30 2001

The following is a list of conditions, observations and analyses which focus direct attention on barium and barium compounds within the investigation of the aerosol operations that are occurring without informed consent:

1. Aerosol is a salt crystal; absorbs moisture at low levels of relative humidity, i.e., hygroscopic.

- 2. Is expected to be soluble.
- 3. Reactive with water but not explosive.
- 4. Reacts with cold water.
- 5. Is alkaline in nature when combined with water.

6. Provides uniques spectrometry signature in the visible light range which are identified with a specific element.

- 7. Is ionizable as evidenced by particulate imagery.
- 8. Is colorless or white.

9. Electrolytic in nature; i.e., subject to disassociation of ions in water.

10. Microwave frequencies are subject to disruption with injection of particles into the atmosphere.

11. Has an estimated vapor pressure of approximately .0143torr at -50deg. C.

12.Historical interest and experimentation documented with use of element(s) in ionization and plasma physics.

13. Respiratory distress associated with ingestion into the respiratory tract.

14. Highly probable to involve a product of combustion.

15. Favorable conditions for aerosol dispersion include increased moisture content and higher relative temperature.

Analysis indicates, to my knowledge, that only one element (and associated compounds) satisfies each of the above conditions. That element is barium. In addition, these conditions are strongly identified with the following compounds of barium:

Barium carbonate, Barium Oxide, Barium hydroxide and Barium hydrate.

Barium Titanate is also under review due to the following property:

"...crystals of barium titanate, a material that can capture the pulses of certain electromagnetic frequencies in the way that a radio can pick up certain radio frequencies. When the crystal pulses, or resonates, it produces electric power." Source: A New Physics for a New Energy Source by Jeanne Manning

The need for chemical review of the properties and reactions of barium titanate remains.

Consideration will be extended equally to any other elements or group of compounds that are known to satisfy the above conditions. Any corrections to this information will be made as is appropriate.

CRYSTALS UNDER EXAMINATION

carnicominstitute.org/crystals-under-examination/

CRYSTALS UNDER EXAMINATION Clifford E Carnicom May 30 2001

A crystalline form has been recently identified within atmospheric samples collected in Santa Fe NM by the methods of electrostatic precipitation which have been outlined previously. Metallic salts are typical examples of crystalline forms. A potentially significant alteration to the precipitation method used has recently been incorporated; these methods introduce both sonic and vapor fields in the collection container. These additions have been made due to the stated improvement in aggregation by the use of these methods. The precipitation occurs on clean glass microscope slides. The crystalline forms are abundant within atmospheric samples collected approximately 1 week ago.

The crystalline forms are essentially colorless and transparent, and are fairly difficult to identify with a visual light microscope. Geometric patterns within the forms are quite evident, often including a zig-zag or wave structure. Rain water samples collected from last year appear to contain the same structures, although again the visual identification remains difficult due to both concentration and transparency. Research on both fronts of identification will continue. The consideration of atmospheric particulate matter easily visible and identifiable under proper light conditions is of high importance.

Initial chemical tests indicate the crystalline forms may be soluble under treatment with hydrochloric acid. Sulfuric acid appears to have little to no effect. The chemistry of barium compounds is also a strong consideration with respect to the analysis currently underway. Size of the crystal forms varies considerably , along with form. Reasonable estimates of size appear to range from 30 to 70 microns. No organic attributes are evident at this time.

Magnification of these images is rather large, at approximately 2000x.



Magnification Approx 2000x. Note wave structure visible.



Magnification Approx 2000x. Note zig-zag wave structure visible.



Magnification Approx 2000x. Note zig-zag wave structure visible.



Magnification Approx 2000x. Note zig-zag wave structure visible.

ATMOSPHERIC MAGNESIUM DISCLOSED

carnicominstitute.org/atmospheric-magnesium-disclosed/



ATMOSPHERIC MAGNESIUM DISCLOSED Clifford E Carnicom Jun 10 2001

The presence of substantial amounts of elemental magnesium within the atmosphere, as procured from rainfall samples, has now been established through recent tests. There is now a need for the extensive collection of rainfall samples by citizens to validate or refute those results which have been obtained locally in Santa Fe, New Mexico.

The method developed to establish this finding is simple to perform, inexpensive and is readily available to all concerned citizens.

The current findings deserve broad distribution due to the simplicity of the method used and the level of access for confirmation or refutation now available to each citizen.

The method of determination of magnesium within atmospheric samples is as follows:

1. Collect rainfall samples in a clean container.

2. Place approximately 2-3 ml (approx. 1/2 tsp.) of a rainfall sample in a clean test tube or container.

3. Add several drops (e.g., 4 to 5) of copper sulfate solution to the rainfall sample. This solution is inexpensive and readily available at aquarium shops.

4. After a few minutes have elapsed, extract a single drop of the rainfall + copper sulfate solution, and place it on a clean microscope slide or a piece of glass.

5. Let the drop evaporate completely at room temperature without disturbance.

6. A crystalline form is expected to develop if sufficient metal concentration exists within the rainfall sample. Each trial conducted thus far on samples obtained Oct 12 2000 and Jun 07 2001 in Santa Fe NM has produced the visible crystalline form.
7. This crystalline form can be identified through a variety of methods, e.g., visual and chemical. Identification processes thus far confirm the existence of magnesium sulfate as a product of the reaction with copper sulfate. This demonstrates the presence of elemental magnesium within the rainfall sample tested. Essentially, the magnesium will replace the copper within the solution, and will precipitate into a solid sulfate form that can be crystallized under the conditions described.

8. A ring of copper sulfate crystals, visually distinctive, is expected to form on the perimeter of the crystal development. Magnesium sulfate crystals will form interior to this ring.

9. An inexpensive hobby microscope (\$15-\$30) at low power (100x) is sufficient to examine the crystal formations.

Numerous control tests of crystalline observations have been conducted, which include:

- 1. Pure water (reverse osmosis).
- 2. Reverse osmosis water with copper sulfate added.
- 3. Copper sulfate solution alone.
- 4. Rainwater samples alone.
- 5. Rainwater samples with copper sulfate added.
- 6. Magnesium sulfate solution alone.
- 7. Magnesium sulfate with copper sulfate added.

Sufficient variations exist between the control samples and the current findings to justify this presentation. If any alternate identification of the crystal form that develops is made, please provide that finding along with the basis of the decisions.

The reaction under consideration is:

Mg + CuSO₄ -> MgSO₄ + Cu

Magnesium sulfate (commonly known as epsom salt) has the following properties:

1. Distinctive visual identification under the microscope. Linear, prism or filament crystals are commonly formed.

- 2. Soluble in water.
- 3. Soluble in alcohol.
- 4. Soluble in glycerin.
- 5. Distinctive bitter taste(also known as bitter salt).
- 6. Dissolves in both hydrochloric and sulfuric acid.
- 7. Colorless, transparent or whitish crystal.

Additional important properties to consider for additional analysis within the aerosol operations include the density, conductivity and ionizability of the element or compound. Magnesium is an extremely light metal, approximately 2/3 the weight of aluminum. Magnesium is extremely conductive, on par with copper and aluminum. Magnesium can be ionized with the energy available within the ultra-violet portion of the spectrum.

These findings provide further evidence of the aerosol operations that have been conducted and remain in progess without the informed consent and knowledge of the citizenry. These findings provide further just cause for the call of accountability and disclosure that remains. All citizens are urged to take an active role to resolve these issues.

It can be stated that the original motivation for this research involves an attempt to physically identify the barium presence that is strongly evidenced by data that has been made available. The high level of solubility in water of the resulting crystal form immediately dismisses barium sulfate as the candidate of examination for this test that has been developed. Elemental magnesium, combining with the sulfate ion provided by the copper sulfate solution, exists as the viable solution to the problem of identification of this crystal. Sufficient and credible evidence to support the claims of unexpected levels of barium in the atmosphere as an adjunct of the aerosol operations remains in force. Recall that attention has repeatedly been directed toward all elements within Groups I and II of the periodic table.

Past external data that has been made available to me reveals the unusual presence of both magnesium and barium within atmospheric samples. As the data within those reports has not yet been publicly distributed, they have not been given undue attention. Previous data made available to me that indicated the presence of unusual amounts of magnesium in the atmosphere is now elevated in status. Evidence continues to accumulate that certain metals, i.e., magnesium and barium, as well as certain biological and fibrous components, are established as the core elements of the aerosol operations in progress. Current testing suggests that magnesium may indeed be the dominant metallic component present. Toxicity levels between varying metals stands as a separate issue. Aggressive testing for these two metal forms as a minimum is now required.

Research on this finding will continue. Any revisions or corrections to this presentation will be made as is appropriate.

Clifford E Carnicom Jun 10 2001

Additional Notes:

Numerous other sulfate forms have been considered as a part of the analysis, and each has been eliminated as a candidate of further evaluation by a variety of methods.

In each of the following cases, one or more conditions preclude further consideration in light of the properties that have been observed. The alternative sulfate forms which have been eliminated from further consideration within this test form include:

1. Cadmium sulfate – effloresces, i.e., crumbles upon exposure to the air.

2. Sodium sulfate – (1) visibly different from the crystal obtained (2) yellow solution formed upon addition of copper sulfate to sodium chloride solution. (3) color variation.

3. stannous sulfate – no significant reaction will take place between tin and copper in solution due to the electrochemical potential difference between the elements.

- 4. barium sulfate not soluble in water.
- 5. calcium sulfate only moderately soluble in water.
- 6. cobalt sulfate melting point of 98.6 deg. C.
- 7. copper sulfate appearance, blue color.

- 8. iron sulfate blue-green color.
- 9. mercuric sulfate not soluble in water.
- 10. magnesium sulfate not eliminated, satisfies all conditions and properties.
- 11. manganese sulfate color, melts at 30 deg. C.
- 12. lead sulfate insoluble in alcohol.
- 13. strontium sulfate insoluble in alcohol.
- 14. potassium sulfate insoluble in alcohol.
- 15. aluminum sulfate melting point of 87 92.5 deg. C.

The copper sulfate solution used in these tests is manufactured by Aquarium Products, Glen Burnie MD, and has a stated strength of metallic copper at 1.61%.

REAL MEDIA PLAYER AUDIO REPORTS

carnicominstitute.org/world-net-daily-real-media-report/



WORLD NET DAILY :

REAL MEDIA REPORTS SUGGESTION: FOR REAL VIDEO SEGMENTS, CONSIDER SETTING VIEW OPTIONS IN REAL PLAYER TO DOUBLE SIZE.

DIANE HARVEY ESSAYS - AUDIO (I)

as read by the author The People's Republic of Information The Meaning of Labor Jul 17 2001

<u>OHIO NATIONAL PROTEST – AUDIO (I)</u> <u>OHIO NATIONAL PROTEST – AUDIO (II)</u> Jun 23 2001

> PARTICULATES VISIBLE VIDEO DEC 22 2000 SANTA FE NM Dec 22 2000

Full credit for the methods and observations recorded on this video are extended to a member of the message board by the name of "Lookinup", as well as to several other members that have substantiated the efforts made to identify particulate matter now readily visible in our skies. Additional information on this page will be forthcoming as time and circumstances permit, but the significance of the evidence available warrants the immediate release of this video. The evidence provided by this video further substantiates those demands which now exist for a formal investigation into drastic atmospheric changes which, by all evidence available, are a direct result of aircraft aerosol operations imposed without citizen consent.

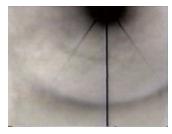
PARTICULATES VISIBLE <u>VIDEO – (no audio)</u> <u>SANTA FE NM</u> Jan 03 2001

JULY 17 2001: THE FOLLOWING MEDIA FILES ARE TEMPORARILY UNAVAILABLE THEY WILL BE RE-ESTABLISHED AS TIME PERMITS.

> <u>Real Video Images : April 13 2000: Santa Fe NM</u> 04/14/00 (15min) Clifford E Carnicom



<u>Real Video Images : April 8-9 2000: Santa Fe NM</u> 04/12/00 (15min) Clifford E Carnicom



World Net Daily Coverage of the Aerosol Issue Clifford E Carnicom : 02/05/00 (10min)



A free Real Media player is available from www.real.com

EPA REFUSES TO IDENTIFY, RETURNS SAMPLE AFTER 18 MONTH DELAY

Carnicominstitute.org/epa-refuses-to-identify-returns-sample-18-month-delay/

EPA REFUSES TO IDENTIFY, RETURNS SAMPLE 18 MONTH DELAY Jul 05 2001 Clifford E Carnicom

Note :

Original Request Sent Jan 12 2000 First acknowledgement to senders of existence of sample on Jun 20 2001.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY 2565 PLYMOUTH ROAD ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF

June 20, 2001

Clifford E. Carnicom David Peterson Chemtrail Research Fund P.O. Box 2921 Aspen, CO 81612

Dear Messrs. Carnicom and Peterson:

Thank you for your letter of January 12, 2000, and a related correspondence of May 30, 2000, concerning your request for us to examine and identify a "Fibrous Substance Sample." As you recall, we provided responses in February and June 2000 to these letters.

We would like to take this opportunity to inform you that it is not the policy of this office of EPA to test, or otherwise analyze any unsolicited samples of material or matter. Accordingly, we are returning the sample to you under separate cover.

We suggest that you contact at your discretion a certified, private analytical laboratory with the capability to analyze this sample to your specific needs and requirements. We regret that we cannot be of further assistance to your request. Please call Bryan Manning at this office (734-214-4832) if you have any questions.

Sincerely yours,

Dlennes Passaren

Glenn W. Passavant Director of Nonroad Center Assessment and Standards Division

PARTICULATE CRIMES

carnicominstitute.org/particulate-crimes/

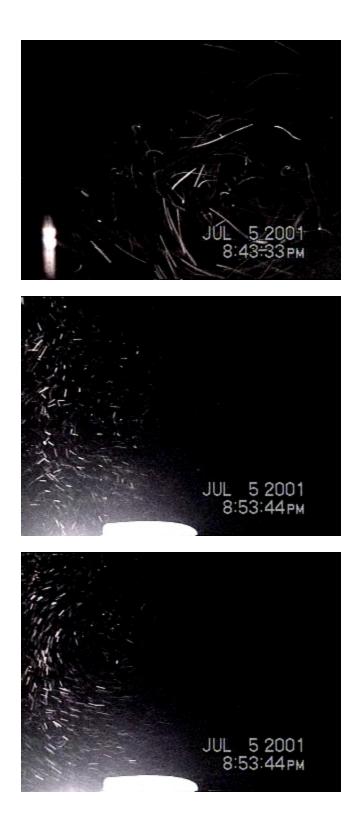
PARTICULATE CRIMES Clifford E Carnicom Jul 06 2001

The following photographs introduce another body of evidence that demonstrates that the atmosphere of this earth has been tragically altered as a result of the aerosol operations. It is the duty of each citizen of this nation and of the globe to seek an immediate accountability for the damage that has been done. These photographs extend the earlier body of evidence presented on this site that demonstrates the saturation levels of particulate matter that are now in our atmosphere.

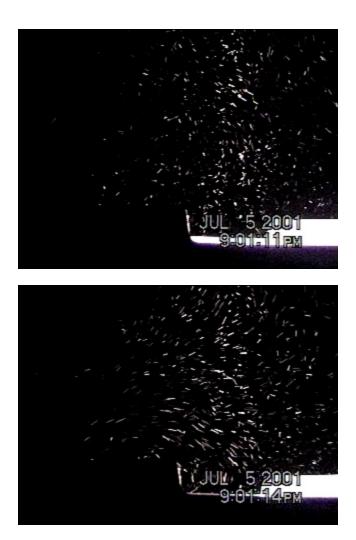
Each citizen is urged to recognize the events which are herein recorded as being a crime against humanity. Each citizen is urged to demand the immediate cessation of the aerosol operations under progress. Each citizen is urged to seek an immediate disclosure of the parties responsible for the damage to the atmosphere, health and the environment. Each citizen is urged to seek immediate accountability for those events which we as a people have become subject to. Life and health, as it has been known, will not continue unaffected under the present circumstances.

The level of particulate matter visible under these controlled lighting conditions is by any measure astounding. The direct involvement of the citizenry at large is required to bring an end to the aerosol operations that have been conducted without informed consent.









These photographs are stills taken from a video taken on the night of Jul 05 2001 in Santa Fe, New Mexico. The methods used to acquire these photographs are the result of original research by an individual on the message board attached to www.carnicom.com, whom is registered as 'loookinup'. The method employs a 1,000,000 candlepower flashlight (Q-Beam) in combination with a video camera. The particulate matter shown is approximately 6-12 inches from the lens of the video camera. Light of this intensity is required to make the particulate matter visible at the level recorded within these images. These methods are a counterpart to those earlier described involving observation of the sun's corona under specific lighting conditions. The methods shown have the advantage of being able to be produced at will under conditions of darkness, and they provide for controlled visibility of the abundant particulate matter now in our atmosphere.

Clifford E Carnicom Jul 06 2001

ATMOSPHERIC CONDUCTIVITY

carnicominstitute.org/atmospheric-conductivity/



ATMOSPHERIC CONDUCTIVITY Clifford E Carnicom Jul 09 2001

Research is indicating that the conductivity of the atmosphere has been increased. This finding is in conjunction with the extensive aerosol operations that have been documented in detail for the last 2 1/2 years, and with the most recent findings that support the claims for the existence of saturated levels of metallic particulates within the atmosphere.

A Van de Graaf generator has been used to create a spark in the open atmosphere at repeated intervals. The length of the spark that the generator can produce is generally predictable, and it is highly dependent upon the size of the sphere of the generator as well as the dielectric strength of the medium (e.g., air) that the spark traverses.

In the cases that are under examination, the generator being used is rated at 200,000 volts. This agrees reasonably well with the theoretical value of the potential for the generator, which has an oblate spheroid of 18 cm. diameter.

The dielectric strength is a measure of the insulating capability of a medium, and is represented by a constant known as the dielectric strength of the material. The dielectric strength of air is stated from numerous sources to be approximately 3 million volts per meter.

This leads to an expected spark length from the generator being used of:

200,000 V / (3E6 volts / meter) = .067 meters = 2.6 inches.

Outdoor measurements with a clean sphere are producing spark lengths much greater than that which is expected, on the order of 10 -12 inches (.254meters).

This indicates that the breakdown voltage of the atmosphere (dielectric strength) of the atmosphere under testing has been reduced to approximately:

200,000 V / .254 meters = 787,400 volts / meter.

This indicates a reduction in the dielectric strength of the atmosphere under testing by a factor of 3.8. If the manufacturer claims of maximum spark lengths of 5" is used, there remains a reduction factor of 2 in the dielectric strength of the atmosphere that is to be accounted for. This finding leads to the conclusion that the atmosphere is not acting as efficiently as an insulator, or conversely, the atmosphere is more electrically conductive than is expected.

One observable and expected consequence of a reduction in the dielectric strength of the atmosphere would be an increase in lightning frequency and intensity.

These findings are preliminary. Any corrections to this presentation are appreciated, and any revisions will be made as is appropriate.

Clifford E Carnicom Jul 09 2001

Note : July 16 2001

These tests were repeated on the night of Jul 16 2001 with the same results. Maximum spark length reached during this test ranged between 10 and 12 inches. Theoretical considerations continue to support and confirm an expected maximum spark length of approximately 3 inches. The results of this test continue to indicate that conductivity characteristics of the atmosphere have been altered.

CRYSTAL CHEMISTRY

carnicominstitute.org/crystal-chemistry/

CRYSTAL CHEMISTRY Clifford E Carnicom Jul 18 2001 Santa Fe NM

Methods of crystal chemistry are now being used to examine rainfall samples on a repeated basis. Results thus far indicate substantial levels of metallic particulates within the samples, with a special emphasis upon magnesium. The following are microphotographs of crystalline forms that have been developed from a set of chemical analyses. The majority of these images are at a magnification of approximately 500x. Positive and unique crystalline forms are now available for identification, and any assistance to this end is appreciated. The systematic elimination of any crystal forms that do not satisfy all visual or chemical properties observed is also required. Collection of rainfall samples in clean containers is encouraged by all citizens across the nation.

The methods that have been developed exploit the electromotive series of the elements, i.e., some metallic elements are more reactive with certain elements than with others. Analysis of the aerosol operations by a combination of methods repeatedly results in considerable attention being given to the elements of Group II of the periodic table (e.g., magnesium calcium, barium). The crystalline form that is primarily shown on this page is most currently and best assessed by myself as magnesium chloride, a derivative product of the qualitative chemical analysis that has been performed. Any information that provides a contrary identification of this crystal form is welcome along with the associated rationale for that decision.

It is expected that crystal chemistry will assume a valuable role in the identification of certain particulates that are now readily documented to exist at inordinate levels within the atmosphere, and that are in direct association with aerosol operations conducted across this country for the last 2 1/2 years without informed consent. The methods are simple to perform, inexpensive, and are subject to specific chemical tests by all interested researchers. The crystals can be initially examined with a relatively inexpensive consumer grade microscope, as this size is sufficient to identify unique formations at relatively low magnification (e.g., 100x).

The method developed to create the crystalline forms as shown on this page is as follows:

1. Approximately 30ml of a rainfall sample collected on Jul 02 1991 was placed in an Erlenmeyer flask.

2. Simple distillation was performed on this sample, and the volume was reduced from 30ml to approximately 4ml to concentrate the sample.

3. Step 2 is optional based upon earlier testing and methods, however, it is found to be beneficial if the sample can be concentrated through distillation or evaporation. Maintaining purity of the sample will be especially important if evaporative methods are used. Results similar to those being presented have been achieved without the use of distillation or evaporation, i.e, rainfall in original concentration.

4. The remaining 4ml sample was then transferred to a test tube.

5. At the end of the distillation procedure, fine particles of apparent metallic form were readily visible within a test tube held up to a bright light.

6. The 4ml sample was then divided evenly among 4 test tubes, each consisting of approximately 1 ml. of rainwater concentrate.

7. The first test tube was left unaltered for control purposes. The heat of the distillation process appears to introduce an oxide reaction which is visible from the evaporation results that use this control sample. The second test tube received 1-2 drops of copper sulfate solution. The third test tube received 1-2 drops of cobalt chloride solution. Lastly, the fourth test tube received 1-2 drops of ferrous sulfate solution. These solutions were chosen because of the electromotive series mentioned earlier: elements of magnesium, calcium and barium will be expected to react positively with these salt solutions that were chosen. Of these solutions, the reaction would be expected to be the strongest with cobalt chloride, followed by ferrous sulfate and copper sulfate because of the electromotive potential differences. These chemicals are not especially difficult to acquire; copper sulfate will be available at aquarium supply shops, and the remaining solutions can be acquired through consumer grade chemistry sets. The general nature of the reaction that will occur in these cases is that free ions of the candidate metal, if existent, (e.g. magnesium, calcium, barium, etc.) will replace the metallic component of the salt solutions used. For example, if magnesium is contained within the sample, magnesium sulfate will form within the second test tube, magnesium chloride will form in the third test tube, and magnesium sulfate will again form in the last tube in reaction with ferrous sulfate. 8. Extremely fine particulate matter within the rainfall samples appears to be readily visible after these chemical reactions are established, identifiable by holding the test tube to a bright light. The amount of material appears, to this observer, to be unusual and unexpected.

9. A single drop of each of the four solutions is then placed on an individual microscope slide. It is left undisturbed and allowed to evaporate completely. During the process of evaporation, obvious and easily visible crystalline forms have developed from each of the rainfall samples under examination. Distillation appears to aid considerably in concentrating the particulate matter within the samples, and crystalline forms are readily visible in all cases. A solid visible crystalline layer across

the area of the drop has formed in all cases with the use of the sulfate and chloride solutions.

10. The crystals are then analyzed under the microscope or other suitable examining equipment.

11. Visual and further chemical identification is then to take place by all participating researchers.

Magnesium sulfate crystals have been previously developed with the use of the copper sulfate solution, and those results are presented on a <u>previous page</u>. Magnesium sulfate crystals have been again identified, to the best of my ability, with the use of both the copper sulfate and the ferrous sulfate solution during this most current test. This page is devoted to the presentation of what is, by the best analysis currently available, magnesium chloride crystals. This indicates the existence of ionic magnesium (Mg+2) within the rainfall sample. The magnitude of crystallization as well as visual examination of the sample prior to crystallization indicates inordinate levels of highly reflective particulate matter within the rainfall concentrate. One characteristic of the magnesium chloride crystal is a hexagonal structure. The base form of the crystals under presentation have a definite hexagonal basis that is especially viewable under the microscope during the crystallization process.

In addition, there is a very strong polarizing effect visible within these crystals under the microscope. This will exist as one of the identifying characteristics of this crystal under examination. Polarizability is "a measure of the response of a molecule to an external electric field" (Oxford Dictionary of Chemistry, 2000). The crystal shown here is easily soluble in water. As has been mentioned, any identification contrary to that of magnesium chloride will be accepted if the appropriate rationale is provided.

Another attribute which supports the identification of this crystal as magnesium chloride is its deliquessence. The crystals shown undergo a major transformation in form after exposure to the air for 24 hours, and they essentially disintegrate. Deliquessence is defined as "the absorption of atmospheric water vapor by a crystalline solid until the crystal eventually dissolves into a saturated solution" (McGraw Hill Dictionary of Chemistry, 1994).

The first four microphotographs show the crystal structure in an original form as developed through the methods describe above. Photographs 5, 6 and 7 show the reaction of the crystal to heat. Again an oxidized form appears to result, and the visual signature appears to be quite unique which should aid all researchers in the identification process. Photograph 7 shows a cubic or block form of crystal which occurs within isolated patches of the slide sample shown. Discussion of that crystalline form will be reserved for a later time as it is now a minority representation.

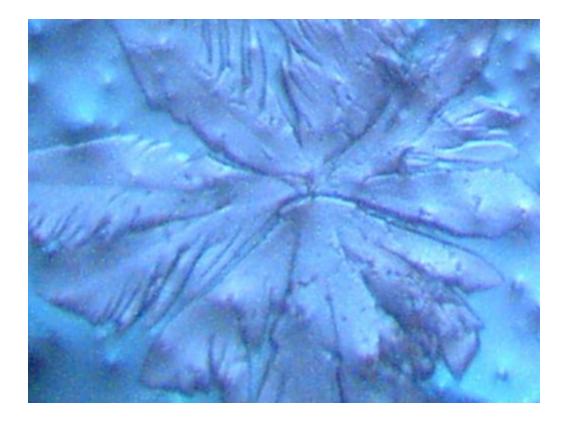
It is hoped that all researchers will investigate and employ the methods that have been outlined, as well as any variations in technique that prove to be beneficial. It is hoped that researchers will engage in accurate identification of the crystalline forms that can now be developed with relatively simple means. It is hoped that quantitative assessments and comparisons to expected baseline values of particulate concentrations will be made.

Any revisions or corrections to this presentation will be made as is appropriate.

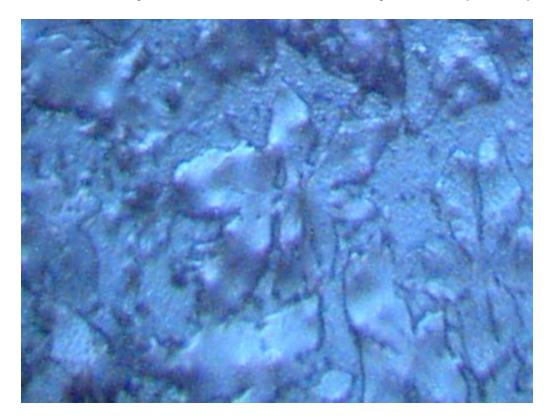


Magnification Approximately 500x.

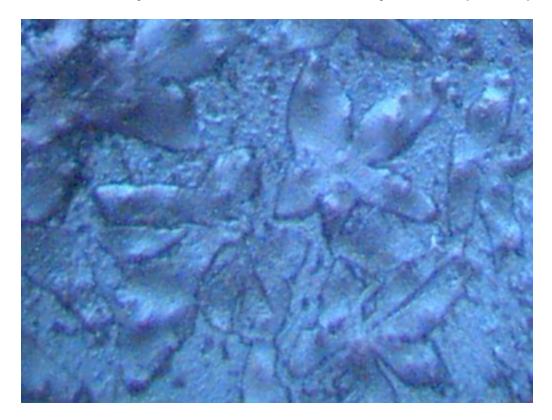
Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation.



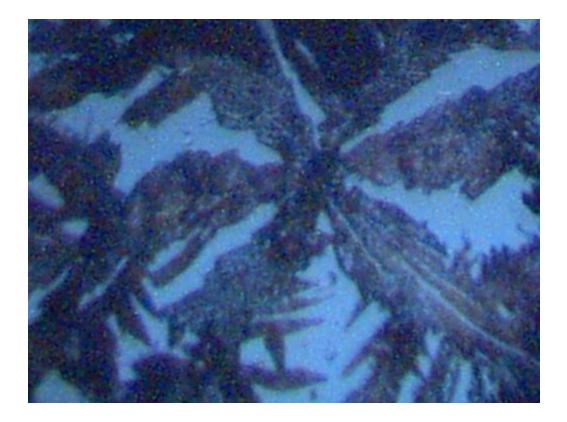
Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation.



Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation.



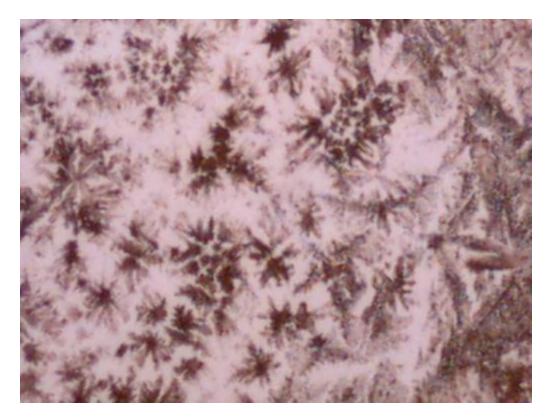
Magnification Approximately 500x. Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation.



Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation. Additionally subjected to heat.



Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation. Additionally subjected to heat.



Magnification Approximately 60x. Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation. Additionally subjected to heat.



Cubic or Block form – isolated patches Magnification Approximately 500x.

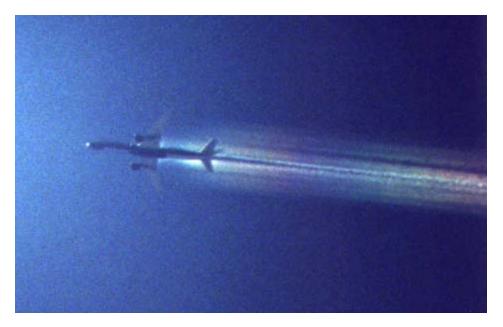
Rainwater distilled, subjected to cobalt chloride, and crystallized upon evaporation. Isolated patches only of this form are found within the samples examined.

Clifford E Carnicom Jul 18 2001

TWO SUBMITTALS: MEGASPRAYER – SATELLITE PHOTO

Carnicominstitute.org/two-submittals-megasprayer-satellite-photo/

TWO SUBMITTALS: MEGASPRAYER – SATELLITE PHOTO Received by Email Posted on behalf of the sender by Clifford E Carnicom July 24 2001



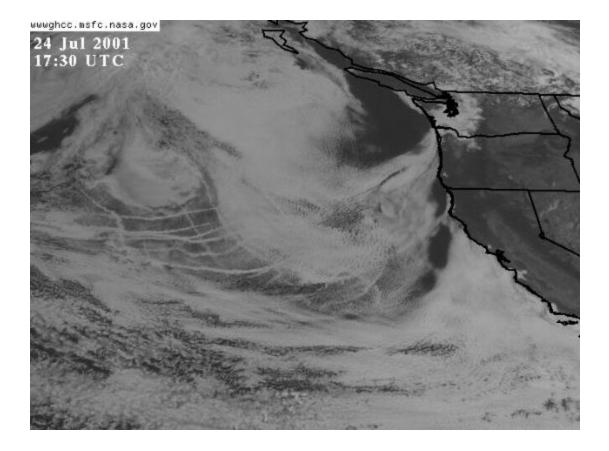
Photograph received by email 071001

Notes submitted by the sender:

"Hi Clifford. I've got another sprayplane for you to see. Both photos are of the same plane just a few seconds apart. The photos were taken on July 5 at approx. 9:00AM in Diamond Springs, CA. the plane approached from the South heading North. It sprayed for approx. 30 seconds, 10 seconds before I took the photo and about 20 seconds after. The trail that it left for that 30 seconds eventually turned into a high cirrus cloud that persisted for several hours. The relative humidity for sacramento at 300mb on July 5 was approx. 67%. Notice the white spray coming from the wings between the engines and the cabin." "I'm sending you the uncropped picture of the Megasprayer I sent you. I thought it might be helpful in determining altitude. I believe it is a Boeing 757 series 200 with an overall length of 155ft. 3in. The print is 4by6 inches and as you recall was shot with 1000 mm lens."



Photograph received by email 071001



Satellite Image Received by Email on 072401

Notes submitted by the sender:

"Hi Clifford. No sprayplanes over Sacramento since the 16th. They've been busy off the coast. Check it out."

RAINWATER METALS

carnicominstitute.org/rainwater-metals/

RAINWATER METALS Clifford E Carnicom Jul 27 2001

Extraordinary levels of metallic particulates are now in the process of being identified within rainwater samples. The particular sample shown here is from rainwater collected on Jul 26 2001 in Santa Fe NM. Distillation of rainwater is being used as the method to accumulate the metallic particulates which are now readily visible to the naked eye within a test tube under sufficient lighting. Methods of crystalline chemistry have previously been outlined; in the case shown here no chemical reagents are involved. The high levels of metallic particulates are directly visible in concentrated form after distillation occurs.

The method shown on this page uses an initial sample of approximately 30ml of rainwater in an Erlenmeyer flask. This amount of rainwater is distilled to leave a concentrate remainder of approximately 4ml. This sample is illuminated with a strong source of light and subsequently photographed.

Future analysis will submit these samples to microscopic examination.

A video file (.mpg format, ~2meg. in size, 36secs. duration) of the current analysis is available for download at the end of this page. A file of this size and resolution is required to adequately demonstrate the reflective and insoluble nature of the material.

Notes : August 1 2001:

The pH of the concentrated rainwater samples has recently been measured at 7.6 or higher (end of scale currently available). This demonstrates a level of alkalinity much higher than that expected in rainwater. The equilibrium pH of rainwater is approximately 5.6 due to the presence of carbonic acid; it is usually less in industrialized areas due to the well-known acid rain phenomenon.



Distilled Concentrate of Rain Water in Test Tube. Metallic particulates are highly visible.



Distilled Concentrate of Rain Water in Test Tube. Metallic particulates are highly visible.

Video File of Current Analysis (.mpg format, 36secs., 2meg) Click Here to Download (Windows : To Save File to Hard Drive : Right Click, Save Link As) (Windows Media Player Option : Use ALT+ENTER to make full screen size)

[File missing as of 2016/02/09]

RAINWATER METALS: MICROSCOPE VIEWS

carnicominstitute.org/rainwater-metals-microscope-views/

RAINWATER METALS: MICROSCOPE VIEWS Clifford E Carnicom Jul 30 2001

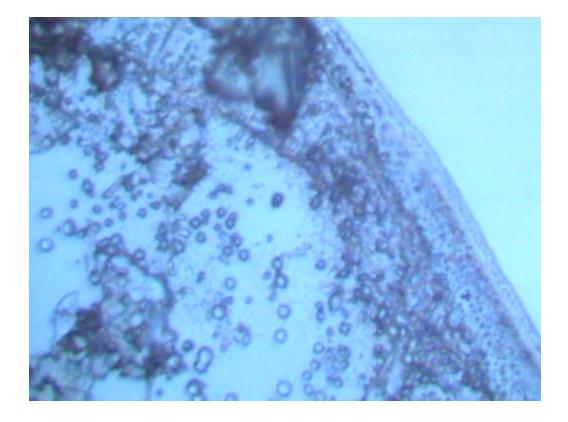
The following photographs of rainwater concentrate as viewed under the microscope are now offered to the public as a complement to the initial investigations recently presented on this website. The majority of the photographs are taken at a magnification of approximately 500x, and they depict an evaporated crystalline form as well as a wet slide mount of the samples.

Collection of rainwater samples by citizens and the subsequent positive identification of all materials that are being shown is both requested and encouraged.

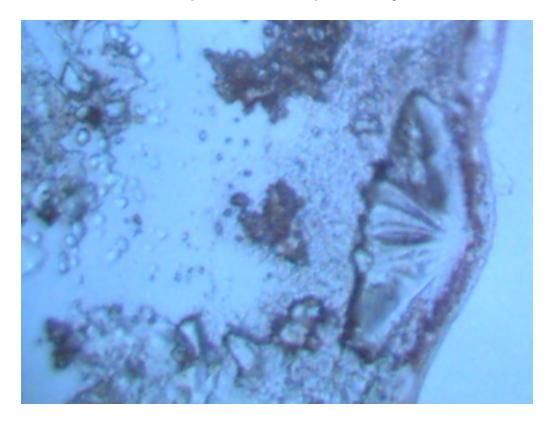
The materials appear to be composed of several distinctive and complex forms. The dominant material appears to be occurring as a metal oxide, which apparently is forming as a result of the heat applied to metal particulates during the distillation process. The evaporated crystalline form on a clean glass slide has a slight pinkish tinge to it. Spherical bodies frequently occur near the perimeter of an evaporated crystal. Isolated occurrences of a rather large crystal also occur along the perimeter. Wet slide mounts make the basic unit of constitution difficult to discern with a light microscope; it appears to be on the order of 1-2 microns in size or less. The presence of fibrous material occurs frequently and is easily visible within the wet slide mount. It appears to measure on the order of 1-2 microns (or less) in diameter. As a frame of reference, a human hair is approximately 60-100 microns in diameter and asbestos fibers are on the order of 2-3 microns in diameter.

Users may also refer to the initial investigation <u>on this page.</u> Crystal examinations as described <u>on previous pages</u> may also be of interest to readers.

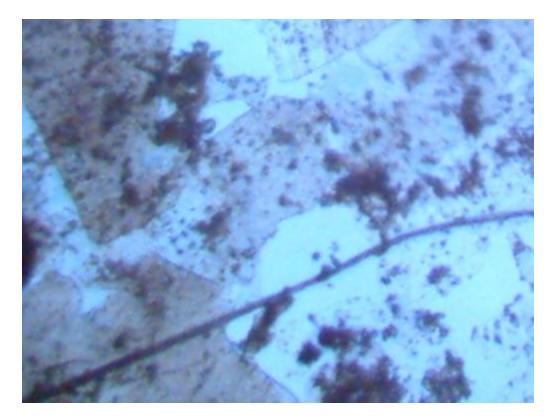
Research will continue on the positive identification of these excessive levels of airborne particulates. Participation by other citizens within this endeavor will be of benefit.



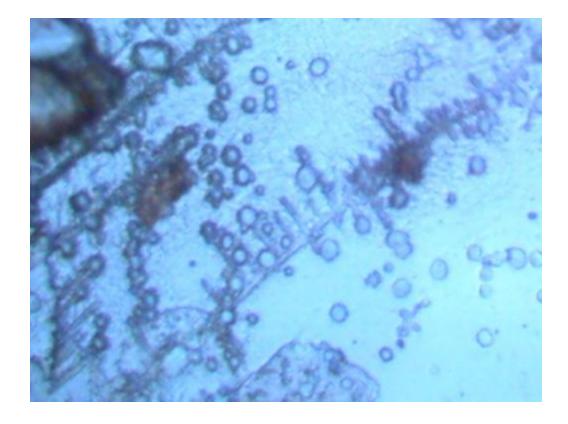
Dried Crystal Form; Magnification Approx. 500x Note Spherical Bodies, size approx. 6 microns; form near perimeter of evaporated crystals.



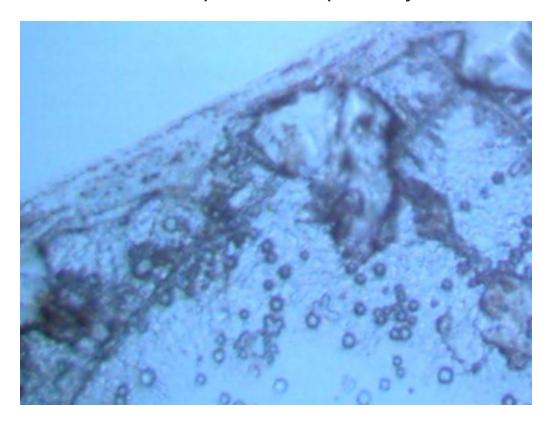
Evaporated Crystal Form; Magnification Approx. 500x Note large crystal form, size approx. 180 microns; occasional formation near perimeter of evaporated crystals.



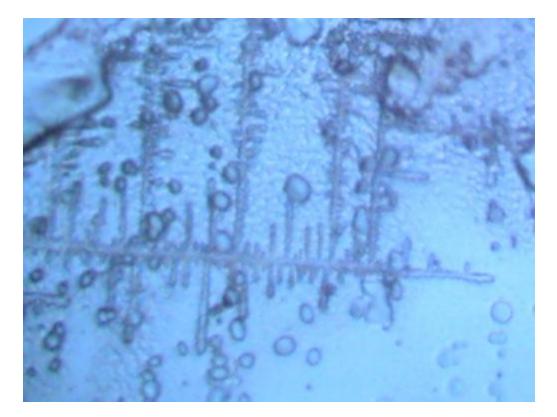
Evaporated Crystal Form; Magnification Approx. 500x Apparent oxide formations; dominates center of evaporated crystal. Single fiber visible; this size of fiber occurs intermittently.



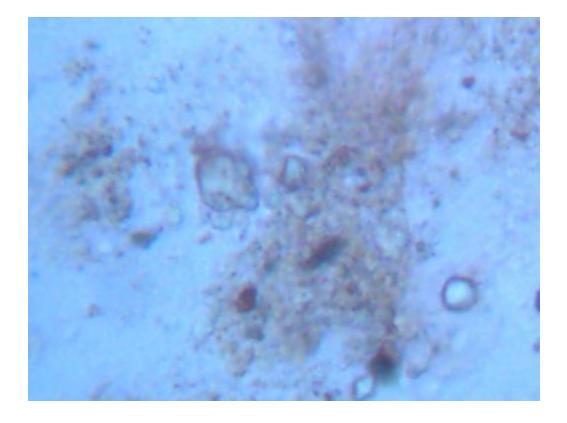
Evaporated Crystal Form; Magnification Approx. 500x Dendritic crystal form; Occurs near perimeter of evaporated crystal.



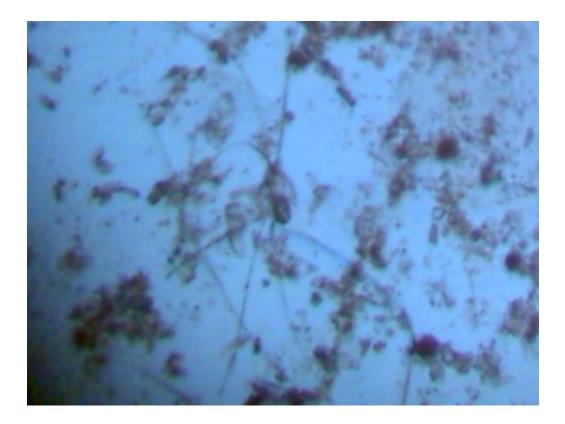
Evaporated Crystal Form; Magnification Approx. 500x Combination of spherical bodies and large crystal formation. Occurs near perimeter of evaporated crystal.



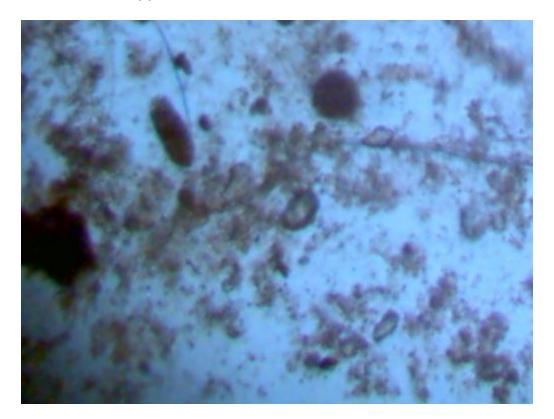
Evaporated Crystal Form; Magnification Approx. 500x Dendritic crystal form; Occurs near perimeter of evaporated crystal.



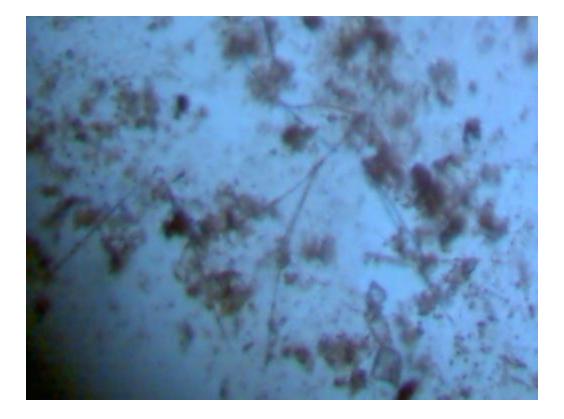
Wet slide mount, magnification approx 500x. Materials appear generally diffuse, and of extremely small size. Smallest distinguishable unit on the order of 1-2 microns or less.



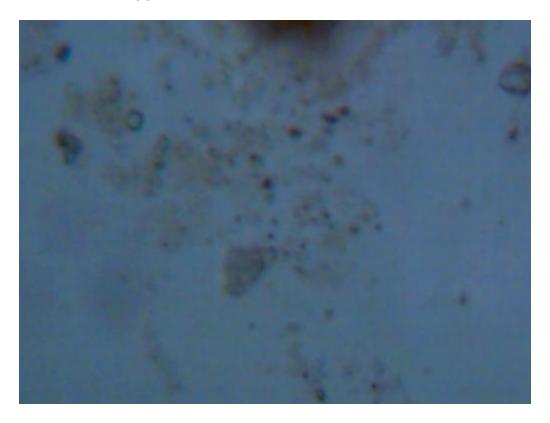
Wet slide mount, magnification approx 500x. Note definite appearance of fibrous materials. Fibers appear to measure at 1-2 microns in diameter.



Wet slide mount, magnification approx 500x. Representative materials that dominate appearance in a wet mount. Smallest unit of size appears to be on the order of 1-2 microns or less.



Wet slide mount, magnification approx 500x. Note definite appearance of fibrous materials. Fibers appear to measure at 1-2 microns in diameter.



Wet slide mount, magnification approx 2000x. Note high magnification : Individual units remain difficult to discern. Dark spotted materials measure at approx. 0.5 microns.

RAINWATER SAMPLES: MICROSCOPE VIEWS (II)

carnicominstitute.org/rainwater-samples-microscope-views-ii/

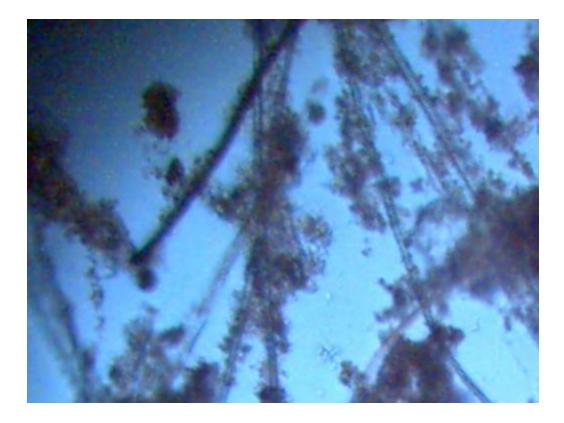
RAINWATER SAMPLES: MICROSCOPE VIEWS (II) Clifford E Carnicom Aug 16 2001 Santa Fe NM

The following photographs of rainwater concentrate as viewed under the microscope are offered with limited interpretation. This page will serve primarily as a log of recurring structures which are found under various conditions. As further information is acquired regarding the identity of certain materials, it will be provided. All citizens are urged to participate in the process of further collection of rainfall samples, subsequent distillation or concentration and the identification of material substances within. Any assistance provided by other researchers or sources is welcome. The majority of the photographs are taken at a magnification of approximately 500x.

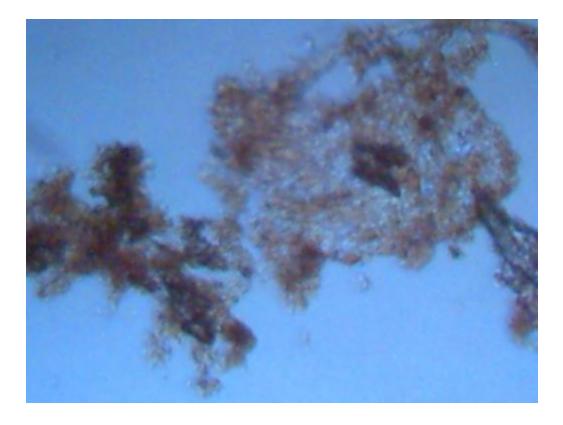
If sufficient rainfall is available, the water is now commonly being reduced by approximately 99% in volume. In two cases, approximately 400ml (~2cups) of rainfall was reduced to a volume of approximately 4ml.

Users may also refer to the initial investigation <u>on this page.</u> Crystal examinations as described <u>on previous pages</u> may also be of interest to readers. Additional microscopic images <u>are available</u> as well.

Additional short descriptions and captions for these microphotographs without comments will be provided in the near future.

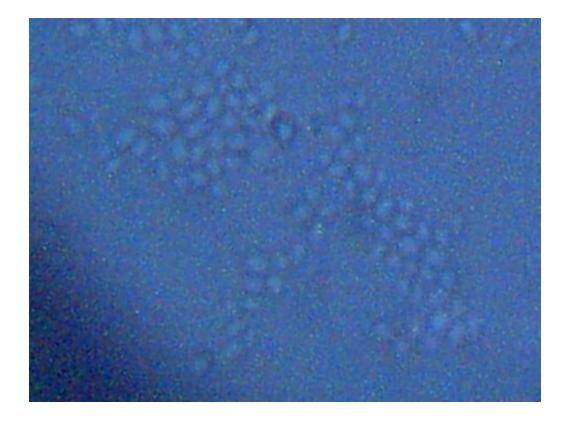


Magnification approx. 500x. Fibrous materials occurring frequently within samples. A dominant material of the samples appears to be an oxide form, which appears to be attracted to fibrous elements when they are present.



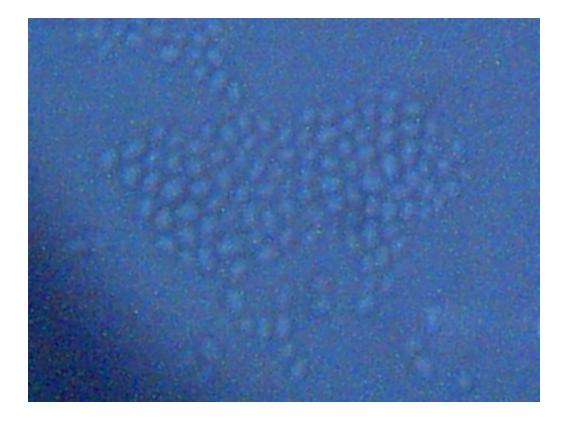
Magnification approx. 500x.

This is one of the visually dominant materials found within the rainfall samples that are subjected to the heat of boiling or distillation. At this stage of investigation, it appears to be an metallic oxide form. Further assistance of identification through chemical analysis is invited.



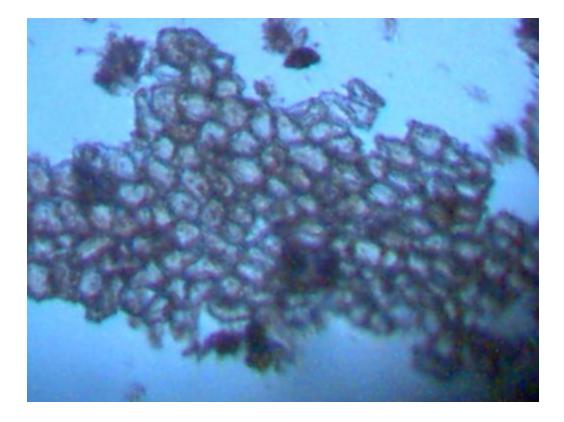
Magnification Approx. 2000x

The appearance of the spherical structures shown has been difficult to detect. Although these forms have been visible in an unaltered rainfall concentrate sample, they have been brought to greater prominence and visibility by the addition of a small amount of sulfuric acid (approx. 2 drops per 4ml). The acid appears to dissolve the apparent oxide form which is dominant in both size and visibility to most samples, but does not appear to affect the spherical components. The spherical structures shown are essentially transparent and difficult to both see and photograph. In a reference book on aerosols that has been consulted, it is of interest to note that aluminum particulates are shown within a photograph as being spherical in shape. The materials shown measure at approximately 2 microns for each sphere (human hair approx. 60-100microns thick).



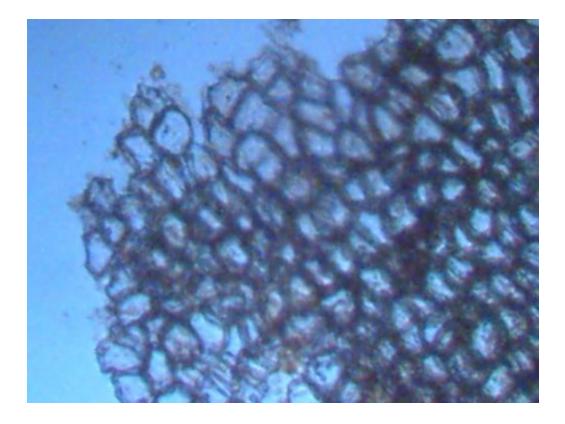
Magnification Approx. 2000x

Another example of the spherical components which have been described above, readily visible and isolated after the introduction of a couple of drops of sulfuric acid into the rainfall concentrate sample. It is also of interest that the remaining sample within the test tube that has been treated in this manner visibly shows what appears to abundant metallic particulate matter within it. Although no claim at this time will be made that this material is aluminum, it does satisfy the expected visible properties of that element. When the test tube is agitated, the highly reflective particulate matter can be seen to adhere and gradually descend on the inside of the glass wall of the test tube.



Magnification approx. 500x.

This material is being shown because of its repeated presence. It has been dismissed on several occasions because it has been assumed to be of a spurious plant origin. The repeated appearance of this cellular structure establishes the need for positive identification of it.



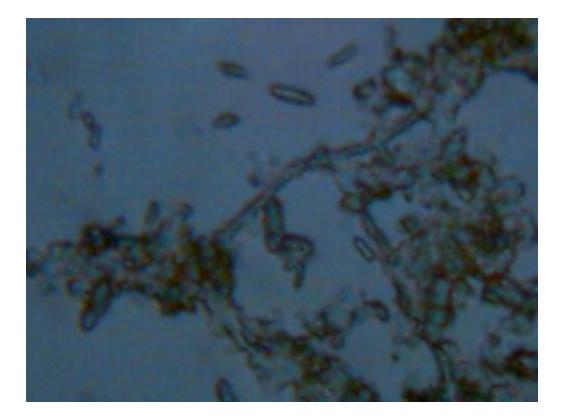
Magnification approx. 500x.

Another example of the cellular layer material that is repeating within different samples

that have been viewed under the microscope. Strong consideration must be given to the

possibility of a plant origin or contaminant with this material. It is reoccurring, however,

and it maintains this form after subjection to heat. It is presented because of the need for identification that exists.



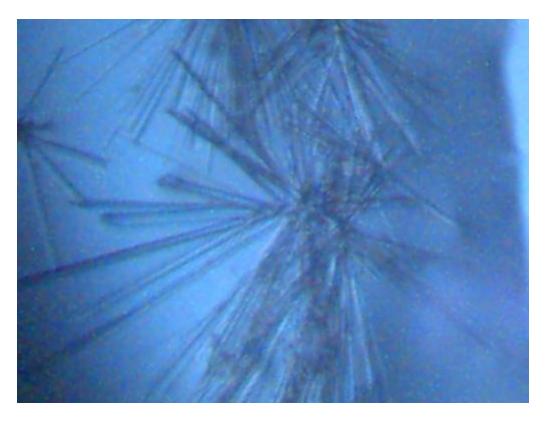
Magnification approx. 2000x.

This photograph shows two primary components. The first is a fibrous component, which forms the backdrop of the image. In addition, numerous rod shaped objects appear within this image. These rods are quite small and numerous within the sample shown. This is an image of what remains after a portion of a wet slide mount has dried. The higher magnification increases the difficulty of light collection under the microscope. The objects have been measured at approximately 1-2 microns in thickness, and approximately 5 microns in length. A human hair is approximately 60-100 microns thick.



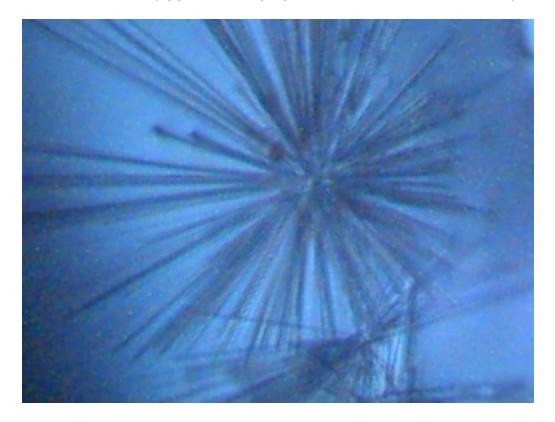
Magnification Approx. 2000x

Another image of the rod-shaped features that are visible under one sample of a wet slide mount that has been allowed to dry.

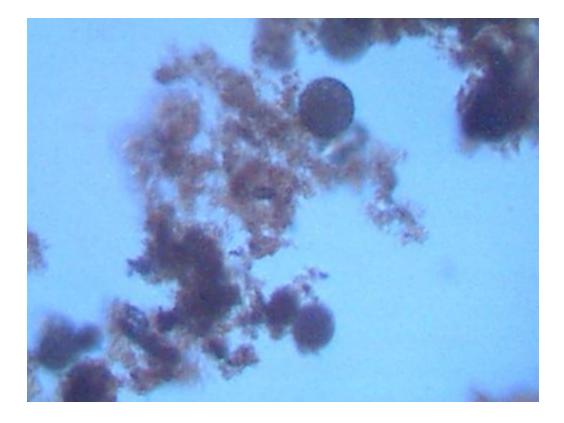


Magnification Approx. 500x

This is a distinctive crystal that is forming along the perimeter of a rainfall concentrate sample that has been treated with a small amount of sulfuric acid (approx. 2 drops per 4ml of rainfall concentrate).

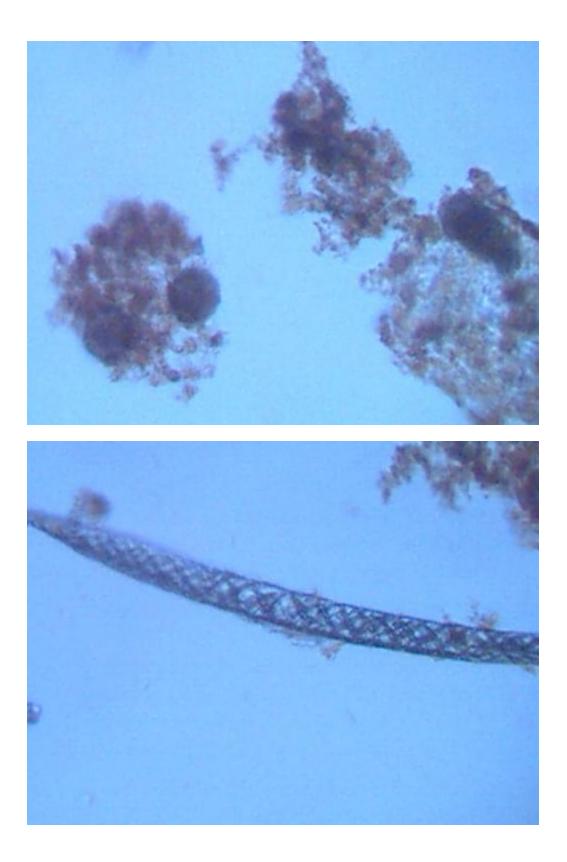


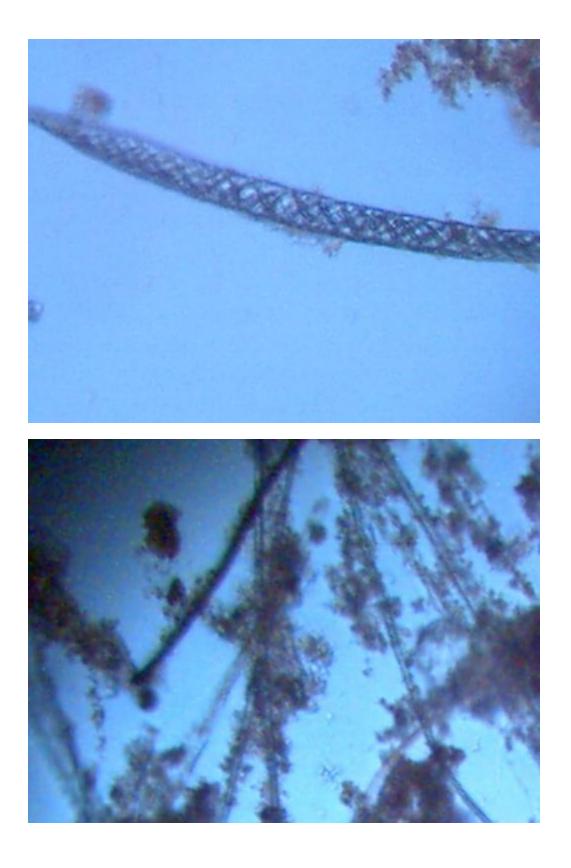
Magnification Approx. 500x Another example of a distinctive crystal that forms under the conditions which have been described immediately above.

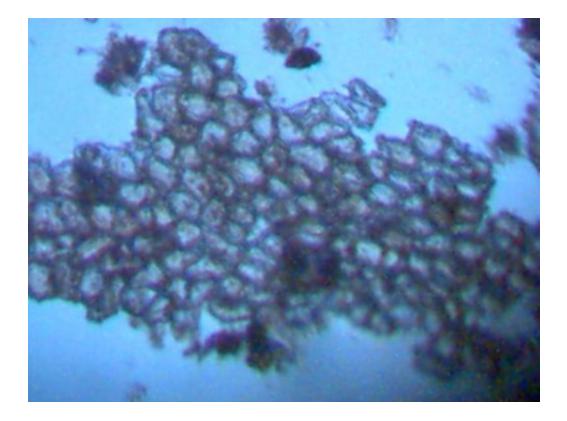


Magnification Approx. 500x

This photograph is dominated with by what appears to be a metal oxide form as has been described earlier. One strong candidate for testing will be magnesium oxide, due to earlier test results with unheated rain water samples. This sample also has the presence of larger circular or spherical objects. At this point these are not to be considered recurring components. Because of their size, strong consideration should be given to the possibility of being a pollen grain. In the past, however, both pine and juniper pollen grains have been identified, (both of which are expected in this southwestern region), and these are not similiar to form of either of these pollen types. It must also be remembered that these rain sample concentrates have been subject to the heat of distillation or evaporation by boiling. If the structures shown continue to appear under further observation, they will also require positive identification.







INITIAL IONOSPHERIC CONSIDERATIONS

carnicominstitute.org/initial-ionospheric-considerations/



INITIAL IONOSPHERIC CONSIDERATIONS Clifford E Carnicom Aug 20 2001 Santa Fe NM

The following statement is provided through the Lancaster University, Department of Communication systems:

"..Although less than 1% of the upper atmosphere becomes ionised the charged particles make the gas electrically conducting, which completely changes its characteristics. The ionosphere can carry electrical currents as well as reflect, deflect and scatter radio waves"...

Source: http://www.dcs.lancs.ac.uk/iono/opps/introduction.html

AIR QUALITY DATA REQUIRES PUBLIC SCRUTINY

carnicominstitute.org/air-quality-data-requires-public-scrutiny/



AIR QUALITY DATA REQUIRES PUBLIC SCRUTINY Clifford E Carnicom Aug 27 2001

SUMMARY OF FINDINGS

A recent analysis indicates that the need for independent testing and verification of current atmospheric particulate counts now exists. Direct access to air quality data from independent sources requires scrutiny by the public in comparison to established US Environmental Protection Agency threshold values. Visibility of the atmosphere is directly related to particulate concentrations. The repeated lay observations of perpetually decreased visibility and omnipresent haze support the need for direct access to independent air monitoring data, despite the claims by federal sources of environmental improvement trends that have been made to the contrary. The demonstrated unwillingness of the U.S. EPA to adequately address the concerns of countless citizens regarding atmospheric degradation by aircraft aerosol operations adds to this need.

In addition, the reduction of visibility reporting standards from a maximum of 40 miles to a maximum of 10 miles by the National Weather Service requires further explanation. The wholesale passiveness by the so-called environmental organizations of this country, including the Sierra Club, Greenpeace International <u>and others</u> to the aerosol operations stands as an equal disservice to the public welfare. The <u>apparent</u> <u>limitations of access</u> to post 1998 public data base files that involve direct atmospheric monitoring (e.g., via nephelometers), such as the <u>Climate Monitoring and</u> <u>Diagnostics Laboratory</u> (NOAA) site, also require further investigation or explanation. In addition to this source, a basis for essentially real-time access to data by the public is now established. The direct visibility of excessive particulate matter by both the corona and high level candlepower light methods requires a formal accounting, as well as the recent concentrated rain samples that reveal extraordinary levels of metallic particulates.

Furthermore, the recent proclamation issued on April 20 2001 by a Walter M. Washabaugh, Colonel, USAF, Chief, Congressional Inquiry Division, Office of Legislative Liason that "The term "chemtrail" is a hoax that began circulating approximately three years ago..." and that "The 'chemtrail' hoax has been investigated and refuted by many established and accredited universities, scientific organizations and major media publications." is also entitled to an eventual reckoning with its author.

Readers may also wish to become familiar with the recently (belatedly?) released 1999 U.S. mortality statistics, which show an increase in chronic lower respiratory deaths. The category of "chronic lower respiratory disease" now ranks as one of the five leading causes of death within the United States.

All data under examination, including federal sources, now requires corroboration and independent verification to assure its validity.

The United States EPA air quality standards now permit 50 micrograms of particulate matter of size 10 microns or less per cubic meter of air. As a point of reference for size, a human hair is approximately 60 -100 microns in thickness. This standard was apparently previously set at 75micrograms / m^3 and the current regulations can be viewed at the <u>EPA web site</u>. Mass quantities of particulate matter 2.5 microns or less are restricted to 15 micrograms / m^3.

An analytical case will be presented on this page to establish the need for direct access of particulate data counts by the public. Such data will need to become available in the raw format. Post processed data will need to be reviewed by independent sources. The approach taken in formulating this case is intended to be conservative, and it is only intended to point out the need for further investigation and independent analysis of raw data results. Any revisions to this presentation will be made as is appropriate.

The goal of this presentation is to arrive at an estimate of the amount of particulate mass in the atmosphere under current conditions, based upon certain relationships, analysis and data that are available at this time.

RELATIONSHIPS EXAMINEDIn the absence of direct and independently verified particulate count data, the theories of light scattering can be used to form at least an initial estimate of the atmospheric concentrations of particulate data. The results of this analysis can establish whether further investigation of particulate counts may or may not be justified. The study is not intended to lend finality to the question in any manner; only to examine the legitimate questions which have now surfaced regarding the degradation of atmospheric quality in direct correlation to the presence of aircraft aerosol operations. The results of this analysis indicate that such concerns are warranted.

This analysis uses the common and simplifying assumptions of particle singlescattering, non-absorbing spherical forms.

This analysis will use three relationships that have been established in the field of light scattering theory:

1. The exponential decay law : I(z) / Io= exp (-gz) where g is the extinction coefficient, z is the path length, and I(z) / Io is the light intensity ratio. (Waves and Grains, Mark Silverman 1998)

2. The extinction coefficient per unit length for a system of particles (N) of a single radius *a* per cubic centimeter (cm3) given as g = pi * a^2 * N * Q where Q is the efficiency factor for extinction, as derived from Mie scattering theory. (Light Scattering by Small Particles, H.C. van de Hulst, 1981)

3. Koschmeider's relationship, z =3.912 / extinction, which may be derived from the exponential decay law. The path length of visibility is z in this case.

In addition, a derived relationship from the previous relations will be used, along with an equation involving mass summation.

Relations 2 and 3 may be combined to form:

4. N = 3.912 / (z * pi * a^2 * Q)

and involving the mass of the particles:

5. Mt = N * mp where Mt is the total mass per unit volume (spherical particles assumed) and mp is the mass of an individual particle.

and since mass = density * volume

6. Mt = (4 * pi * a^3 * d * N) / 3 where d is the density per unit volume.

EXAMPLE CASESThe need at this point is to establish representative values for use in the relationships and equations that are outlined above. A conservative approach to these values will be taken.

The first goal is to solve for N, the estimated number of particles assumed to be of constant radius per unit volume. The following quantities are necessary to estimate:

z, *a* and Q.

Let us assume z, or the visibility in this case is 20 km (~12.4 miles). In light of the <u>visibility report recently presented</u>, this value is not unreasonable under many conditions that are now frequently encountered. Within this page, it is now observed that visibility is frequently reported as being less than 10 miles, and that 10 miles is now the registered maximum visibility of interest within climatic database sources. The change of standards from 40 miles to 10 miles in October of 1997 deserves additional consideration and review by all citizens.

Another method can also be used to establish a reasonable starting point for z, or the visibility. If the reader will notice the extinction coefficient data obtained by recent nephelometer readings at the University of Maryland, it will be noticed that the extinction coefficient for the current year appears to be generally increasing. The general relationship that exists (#3, Koschmeider described above) is that the higher the extinction coefficient, the lower the visibility. This increase corresponds to the general deterioration of atmospheric visibility that is described by current researchers and countless citizens on the aerosol issue. It is noticed that the readings have recently been peaking commonly at 0.35 to .37 / km. It is of interest that this value corresponds guite well with the values stated to accompany specified meteorological conditions at this site that concerns nephelometers. Hazy skies are stated to begin occurring at this level. Let us therefore choose a more conservative value of 0.2 km. From Koschmeider, or from direct derivations of the exponential decay law, the expected visibility in this case would would be 3.912 / 0.2 km = 19.6 km. This agrees therefore, with both measured data and real world observations at a fairly conservative level. Note that an increased value used for the extinction coefficient (also justifiable in certain cases being witnessed) would only lead to an increase in the mass concentrations estimated from this study.

Note also from *The Nature of Light and Colour in the Open Air*, M. Minnaert, 1954, that visibility is expected to be better in the summer months than in the winter months. This expectation is at odds with the nephelometer data thus far available, as the increasing extinction coefficient that is shown depicts an environment of decreasing visibility in the summer months.

The value of *a*, the constant particle radius assumed in this case is an important quantity, and will lead to highly variable results. It is therefore important to arrive at a reasonable and conservative value for this radius. The method of selecting this radius can be chosen to be dependent upon the color of the haze that is now commonly pervasive. Fortunately, the color of the haze can be used as a significant indicator of the particle size within the atmosphere.

Let us consider first a certain statement made by Vincent Schaefer (Atmosphere, 1981) where blue haze characteristics are described: Note that this statement refers to the diameter of the particle as opposed to the radius.

"This effect is caused by the nearly uniform scattering of light from particles just above the threshold of visibility (0.1 to 0.3 micron in diameter)".

Next, consider statements by H.C. van de Hulst (Light Scattering by Small Particles, 1981):

"Scattering by the aerosol (haze and dust) .. is due to scattering by a large variety of particles, usually with radii < 1 micron".

and in regard to larger particles,

"The drops of clouds, fog and rain are very much larger than those in the haze described in the preceding section. ...the radii of the drops that dominate the extinction and scattering characteristics are in the range of 5 microns to 20 microns".

The size of the particles evaluated is a critical factor, and must be considered in detail and in correspondence with observed visual characteristics of the atmosphere. There are, in fact, established relationships between the size of particles in the atmosphere and the corresponding colors of light observed.

A conservative estimate of particle size radius in this case being examined will be 0.3 micron. This would equate to a diameter of 0.6 microns. The blue haze described does little to impair visibility, and a value of less than 0.3 microns for the radius would likely be inappropriate. If the reader accepts a whitish haze as characteristic of the current conditions, it would be both reasonable and conservative to select a value for *a* at the size stated. If a larger value for *a* would be chosen for this example, it will only increase the mass estimates that have been arrived at. A conservative value for this radius is deliberately being chosen for this example, in an attempt to introduce no skews into the final results.

The efficiency factors, developed by Mie, are dependent upon the particle radius, and are tabulated within the source by van de Hulst. For a particle size of 0.3 microns, Q is tabulated as approximately 2.1 and it does not vary significantly over the expected

size range to be considered.

We can now arrive at an estimate for N, the number of particles per unit volume. Units will be chosen to lead to a volume concentration of grams per cubic centimeter, and will subsequently be converted to EPA standards of micrograms per cubic meter. Using the chosen values:

N = 3.912 / (z * pi * a^2 * Q) = 3.912 / (2E6cm * 3.14 * (.3E-4cm)^2 * 2.1) = 329 particles / cubic centimeter.

Choosing a larger value for *a* (e.g., 1 micron) would significantly reduce the particle count. The mass concentration, however, will be significantly increased due to the cube relationship of volume.

Continuing with a mass concentration estimate for the current example:

Mt = (4 * pi * a^3 * d * N) / 3 where d is the density per unit volume,

and again choosing a conservative density estimate of 1.6 gms /cm^3,

This leads to a mass concentration estimate of:

Mt = (4 * pi * (.3E-4cm)^3 * 1.6 * 329) / 3 = 5.95E-11 gms / cm^3 = 5.95E-5 gms / cm^3 = 59.5 micrograms / cubic centimeter.

Note that this would exceed the EPA particulate thresholds under the conditions that have been described.

These results, along with the corresponding conservative values chosen, provide some level of justification for further scrutiny of the EPA threshold values contrasted with current observations, analysis and data that are now readily available. Independent data sources are now a requirement due to the disenfranchisement of citizens by the EPA and their lack of investigation.

Additional Notes:

Readers may wish to review the results of an earlier study completed by this researcher entitled:

MICROSCOPIC PARTICLE COUNT STUDY NEW MEXICO 1996 -1999 completed on Mar 23 2000. This study was completed at the time without any awareness or knowledge of EPA particulate threshold values. Analysis was made strictly from a statistical difference viewpoint. It is of considerable interest to note that an average level of 46 micrograms per cubic meter resulted from this study. This is surprisingly close to the threshold value even though the study concerns 1999 and pre-1999 data.

Most observers would agree that there has been a significant and further deterioration in the visual characteristics of our atmosphere since the time this study was completed.

It may also be recalled that a willful attack on the credibility of the earlier report was made by a certain "individual" shortly after the original presentation. Readers may wish to assess the value of the current report of this page and the referenced <u>past</u> <u>report</u> as well as any opposing claims. The use of original NM state data vs. the use of processed EPA data from a subsequent counter-study by the independent party may be relevant to the evaluation. The original study remains as presented without cause for revision.

A summary of that report is as follows:

APPENDIX:

Source of data : New Mexico Environment Department – Air Quality No. of observations from five monitoring stations 1996-1998 : 129410 No. of observations from five monitoring stations 1999 : 43449 Measured quantity : PM10(<=10microns) Mean of observations 1996-1998 : 39.42 micrograms/cubic meter Mean of observations 1999 : 45.70 micrograms/cubic meter Standard deviation of observations 1996-1998 : 111.69micrograms/cubic meter Standard deviation of observations 1999 : 134.57micrograms/cubic meter Zm Statistic : 11.65 F Statistic : 1.45

NATIONAL & GLOBAL NOTICE GIVEN

carnicominstitute.org/national-global-notice-given/



NATIONAL & GLOBAL NOTICE GIVEN Posted on behalf of an Active Citizen by Clifford E Carnicom Sep 04 2001

INTRODUCTORY NOTES BY THE SENDER:

4 Sep 2001

Dear Cliff,

Per your request, I've compiled a partial list of individuals/positions/organizations to whom I've already MAILED (via snail mail USPS)copies of your website pages – 5 sheets in all, with both sides presenting your website materials.

Now then, the informational packets were sent out in either one of two 'configurations'.

First configuration consisted of :

Page showing "Particulate Crimes" (both sides)

Top page of "Clarifying Chemtrail Confusion" by Will Thomas off Jeff Rense's sight "Biological Components Identified" off Cliff's site again,

"Erythrocytes: Positive Visual Identification" off Cliff's site,

"Third Megasprayer Captured" off Cliff's site, then

"Megasprayer Number 4 Captured" off Cliff's site,

then "CTs Stunning Visual, Physical Evidence of Massive Air Contamination" off Jeff Rense' site.

Second 5 sheet, 10 page 'configuration' consisted of

"Particulate Crimes" pages 1 & 2,

"Biological Components Identified", page 3,

"EPA Refuses To Identify, Returns Sample" page 4,

"Erythrocytes: May 22" page 5,

"The Stealth Genocide Program" (top page) from 'Ether Zone' site with address at wysiwyg://block2.5/http://etherzone.com/dowb081601.shtml page 6,

Chemtrail spraying photos from http://www.carnicom.com/mega2.htm page 7,

More photos from http://www.carnicom.com/newsprayb.htm page 8,

"Rainwater Metals: Microscope Views" page 9,

and "Air Force Lies To America" page 10.

Sep 05 2001

Since it is blatantly apparent that FEDERAL officials appointed to their respective FEDERAL office and their FEDERAL agencies during both the Clinton Administration as well as the Bush Administration have, are and will continue to use the powers of their office/agency to engage in CRIMINAL MALFEASANCE as well in OBSTRUCTION OF JUSTICE with specific regard to this CHEMTRAIL spraying all across the continental United States of America, chemtrail information letters have been sent to the following FEDERAL Law Enforcement Officers in the U.S. Marshal's Service:

THE LIST OF RECIPIENTS NOW INCLUDES:

The U.S. Surgeon General Office of the U.S. Surgeon General Department of Health & Human Services 200 Independence Avenue S.W. Washington, D.C. 20201

The Deputy U.S. Surgeon General Office of the U.S. Surgeon General Department of Health & Human Services 200 Independence Avenue S.W. Washington, D.C. 20201

The Chief of Staff Office of the U.S. Surgeon General Department of Health & Human Services 200 Independence Avenue S.W. Washington, D.C. 20201

The American Medical Association AMA Chicago Headquarters 515 N. State Street Chicago, IL 60610

The American Medical Association AMA New Jersey Office 119 Cherry Hill Road – 3rd Floor Parsippany, NJ 07054

The American Medical Association AMA Washington Office 1101 Vermont Washington, D.C. 20005 The American Medical Association AMA Insurance Agency, Inc. 200 N. Lasalle Street – Ste. 400 Chicago, IL 60601

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Eastern District of Arkansas U.S. Marshal Conrad Pattilo U.S. Courthouse 600 W Capitol Avenue – Room 445 Little Rock, AR 72201

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Central District of California U.S. Marshal Tony Perez U.S. Courthouse 312 N Spring Street – Room G-23 Los Angeles, CA 90012

Southern District of California U.S. Marshal Steven C. Stafford (Acting) U.S. Courthouse 940 Front Street – Room LL B-71 San Diego, CA 92189 District of Colorado U.S. Marshal Tina Rowe U.S. Courthouse 1929 Stout Street – Room C-324 Denver, CO 80294

District of Connecticut U.S. Marshal John R. O'Connor U.S.Courthouse 141 Church Street – Room 323 New Haven, CT 06510

District of Columbia U.S. Marshal Donald W. Horton U.S. Courthouse 3rd & Constitution Avenue, NW – Room 1103 Washington, D.C. 20001

District of Delaware U.S. Marshal Timothy P. Mullaney, Sr. U.S. Courthouse 844 King Street – Room 4311 Wilmington, DE 19801

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Southern District of Illinois U.S. Marshal Terrance Delaney U.S. Courthouse 750 Missouri Avenue – Room 127 East St. Louis, IL 62201

Northern District of Indiana U.S. Marshal Michael D. Carrington Federal Building 204 S Main Street – Room 233 South Bend, IN 46601

Southern District of Indiana U.S. Marshal Frank J. Anderson U.S. Courthouse 46 E Ohio Street – Room 227 Indianapolis, IN 46204

Northern District of Iowa U.S. Marshal Dennis H. Blome Federal Building 101 First Street, SE – Room 320 Cedar Rapids, IA 52401

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Middle District of Tennessee U.S. Marshal Edward S. Blair Estes Kefauver Federal Building 110 9th Avenue S – Room A750 Nashville, TN 37203

Western District of Tennessee U.S. Marshal Wesley Wood Federal Building 167 N Main Street – Room 1029 Memphis, TN 38103

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Western District of Wisconsin U.S. Marshal Dallas S. Neville U.S. Courthouse

120 N Henry Street – Room 440 Madison, WI 53703

District of Wyoming U.S. Marshal Juan A. DeHerrera Joseph C. O'Mahoney Federal Center 2120 Capitol Avenue – Room 2124 Cheyenne, WY 82001

I'm quite sure that, by now, these U.S. Marhsals and their Deputy U.S. Marshals have witnessed chemtrail spraying for themselves with their very own eyes over their own places of residence.

In order to circumvent the lies, deceptions and 'disinformation' bellowed by "authoritative spokesmen" of the U.S. Air Force and the U.S. Environmental Protection Agency regarding the nature of 'Chemtrails', I've taken the liberty to send chemtrail information letters to the following individuals/organizations with the thought that THEIR expertise coupled with the resources/equipment at their disposal would validate and/or confirm the findings here on Mr. Carnicom's Website. Confirmation of these findings would provide the necessary evidence for Federal Law Enforcement officers TO ARREST those responsible for chemtrail spraying:

Director – O.S.H.A. Regional Office JFK Federal Building – Room E340 Boston, MA 02203

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Director – O.S.H.A. Bangor Area Office 202 Harlow Street, Room 211 Bangor, ME 04401

- Director O.S.H.A. Portland District Office 100 Middle Street, Ste. 410 West Portland, ME 04101
- Director O.S.H.A. Concord Area Office 279 Pleasant Street – Ste. 201 Concord, NH 03301

Director – O.S.H.A. Providence Area Office Federal Office Building 380 Westminster Mall, Room 243 Providence, RI 02903

Director – O.S.H.A. Regional Office 201 Varick Street – Room 670 New York, NY 10014

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Director – O.S.H.A. Hasbrouck Heights Area Office 500 Route 17 South – 2nd Floor Hasbrouck Heights, NJ 07604

> Director – O.S.H.A. Marlton Area Office Marlton Executive Park, Building 2 701 Route 73 South, Ste. 120 Marlton, NJ 08053

Director – O.S.H.A. Parsippany Area Office 2999 Cherry Hill Road, Ste. 304 Parsippany, NJ 07054

Director – O.S.H.A. Albany Area Office 401 New Karner Road – Ste. 300 Albany, NY 12205-3809

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Director – O.S.H.A. Buffalo Area Office 5360 Genesee Street Bowmansville, NY 14026

Director – O.S.H.A. Long Island Area Office 1400 Old Country Road – Ste. 208 Westbury, NY 11590

Director – O.S.H.A. Manhattan Area Office 6 World Trade Center, Room 881 New York, NY 10048

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Director – O.S.H.A. Tarrytown Area Office 660 White Plains Road – 4th Floor Tarrytown, NY 10591-5107

Director – O.S.H.A. Puerto Rico Area Office BBV Plaza Building 1510 FD Roosevelt Avenue Guaynabo, PR 00968

Director – O.S.H.A. Regional Office The Curtis Center – Ste. 470 West 170 S. Independence Mall West Philadelphia, PA 19106-3309 Director – O.S.H.A. Baltimore/Washington Area Office 1099 Winterson Road – Ste. 140 Linthicum, MD 21090

Director – O.S.H.A.Wilmington Area Office Caleb Boggs Federal Building 844 North King Street – Room 2209 Wilmington, DE 19801

Director – O.S.H.A. Allentown Area Office 850 North 5th Street Allentown, PA 18102-1731

Director – O.S.H.A. Erie Area Office 3939 West Ridge Road – Ste. B12 Erie, PA 16506-1857

Director – O.S.H.A. Harrisburg Area Office Progress Plaza 49 North Progress Avenue Harrisburg, PA 17109-3596

Director – O.S.H.A. Philadelphia Area Office US Custom House – Room 242 Second & Chestnut Street Philadelphia, PA 19106-2902

Director – O.S.H.A. Pittsburg Area Office Federal Office Building – Room 1428 1000 Liberty Avenue Pittsburg, PA 15222-4101

Director – O.S.H.A. Wilkes-Barre Area Office The Stegmaier Building – Ste. 410 7 North Wilkes-Barre Blvd. Wilkes-Barre, PA 18702-5241

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CAL/OSHA Consultation Service Department of Industrial Relations 455 Golden Gate Avenue – 10th Floor San Francisco, CA 94102

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Mr. Tom Czehowski, Chief Administrative Officer Occupational Safety & Health Enforcement Section (OSHES) 1301 N. Green Valley Parkway – Ste. 200 Henderson, NV 89014-6197 Political appointees to Federal Agencies as well as commissioned officers in the U.S. Armed Forces, particularly the U.S.Air Force, must think that the whole lot of U.S. citizens are as "clueless" as GS-1's or E-2's working in their offices or on their bases. Hence, I've taken the liberty to provide the information and data you have accumulated on chemtrails to the following ENVIRONMENTAL PROFESSIONS:

Scott E. Merkle, CIH – Chair Ruth McCully – USDOL/OSHA – Past Chair Brad T. Garber, PhD, CIH, DABT, University of New Haven – Vice Chair Patrick N. Breysse, PhD, CIH, John Hopkins University – Vice Chair Elect John W. Teske, CIH, CSP, PE (Retired) – Secretary-Treasurer David G. Taylor, PhD, CIH, CBSP (Retired) – Secretary-Treasurer-Elect Alice L. Greife, PhD, CIH, Central Missouri State University – Member-at-Large Vickie L. Wells, MS, CIH, CSP, City & County of San Francisco, Dept. of Public Health Charles J. Shields, MS, CIH, USDOL/OSHA – Member-at-Large Seth J. Burmeister – USDOL/OSHA @ American Governmental Industrial Hygienists 1330 Kemper Meadow Drive Cincinnati, OH 45240

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Jane McCammon – NIOSH Denver Federal Center P.O. Box 25226 Denver, CO 80225-0226

George Conway, M.D., M.P.H. NIOSH Activity Chief Grace Hall, Ste. 310 4230 University Drive Anchorage, AK 99508

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"'I will pull down my barns and build bigger ones, and store all my grain and my goods in them, and I will say to my soul; My soul, you have plenty of good things laid by for many years to come; take things easy, eat, drink, have a good time.' But God said to him, 'FOOL! This very night the demand will be made for your soul; and this hoard of yours, whose will it be then?" – Jesus Christ – Lk.12:18-20

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"The liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than their democratic State itself. That, in its essence, is FACISM – ownership of government by an individual, by a group, or any controlling private power."

Franklin Delano Roosevelt (1882-1945)
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"I sincerely believe that banking establishments are more dangerous than standing armies and that the principle of spending money to be paid by posterity, under the name of funding, is but

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"The two greatest obstacles to democracy in the United States are, first, the widespread delusion among the poor that we have a democracy, and second, the chronic terror among the rich, least we get it."

Edward Dowling, S.J.
 American Priest, editor

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"To CRITICIZE one's country is to do it a service...CRITICISM, in short, is more than a right; IT IS AN ACT OF PATRIOTISM – a higher form of patriotism, I believe, than the familiar rituals and national adulation." – J. William Fulbright (1905-) American Senator

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"The Devil is at the origin of the first misfortune of mankind. So we know that this dark and disturbing spirit really exists, and that he still acts with treacherous cunning; he is the secret enemy that sows errors and misfortunes in human history... who finds his way into us by way of the senses, the imagination, lust, utopian logic, or disorderly social contacts in the give and take of life." – Pope Paul VI – November 7, 1972

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"Then the dragon was enraged with THE WOMAN and went away to make war on the rest of her children, that is, all who obey God's commandments and bear witness for Jesus." – St. John – Rev.12:17

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"The source and root of all the evils which affect individuals, people and nations with a kind of poison, and confuse the minds of many is ths: ignorance, but at times a contempt for, and a deliberate turning away from it." – Pope John XXIII (1881-1963) Pope from 1958

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St. Anthony Messenger 1615 Republic Street Cincinnati, OH 45210-1298

Catholic Universe Bulletin 1027 Superior Avenue Cleveland, OH 44114-2556 The Catholic Times 197 E. Gay Street Columbus, OH 43215

Today's Catholic Teacher 330 Progress Road Dayton, OH 45449

The Steubenville Register P.O. Box 160 Steubenville, OH 43952-2181

> Catholic Chronicle P.O. Box 1866 Sylvania, OH 43560

Catholic Exponent 144 WS Wood Street Youngstown, OH 44503

The Sooner Catholic P.O. Box 32180 Oklahoma City, OK 32180

Eastern Oklahoma Catholic P.O. Box 690240 Tulsa, OK 74169-0240

> Catholic Sentinel 5536 N.E. Hassalo Portland, OR 97213

Pax Christi 532 W 8th Street Erie, PA 16502

The Catholic Accent P.O. Box 850 Greensburg, PA 15601

Catholic Standard 222 N 17th Street Philadelphia, PA 19103-1202 The Miraculous Medal 475 E. Chelten Avenue Philadelphia, PA 19144-5785

Pittsburg Catholic 135 1st Avenue #200 Pittsburg, PA 15222-1506

Catholic Light P.O. Box 708 Scranton, PA 18501-0708

The New Catholic Miscellany P.O. Box 818 Charleston, SC 29402

> West River Catholic P.O. Box 678 Rapid City, SD 57709

The Bishop's Bulletin 523 N.Duluth Avenue Sioux Falls, SD 57104-2714

The West Tennessee Catholic 5825 Shelby Oaks Drive Memphis, TN 38134-7389

W. Texas Catholic P.O. Box 5644 Amarillo, TX 79107-7252

S. Texas Catholic P.O. Box 3948 Beaumont, TX 77704-3948k

> The Texas Catholic P.O. Box 190347 Dallas, TX 75219

N. Texas Catholic 800 W. Loop 820 S. Ft.. Worth, TX 76108 The Carmelite Review 6725 Reed Road Houston, TX 77087

The Texas Catholic Herald 1700 San Jacinto St. Houston, TX 77002

South Plains Catholic P.O. Box 98700 Lubbock, TX 79499-8700

Today's Catholic 2718 W. Woodlawn San Antonio, TX 78228-0410

Catholic East Texas 1015 E.Southeast Loop 323 Tyler, TX 75701-9663

The Catholic Lighthouse 1505 E. Mesquite Lane Victoria, TX 77901

Intermountain Catholic P.O. Box 2489 Salt Lake City, UT 84103

The Vermont Catholic Tribune P.O. Box 526 Burlington, VT 05402

The Catholic War Veteran 441 N. Lee Street Alexandria, VA 22314

Arlington Catholic Herald 200 N. Glebe Road – Ste. 607 Arlington, VA 22203

The Catholic Virginian P.O. Box 26843 Richmond, VA 23261-6843 Central Washington Catholic 5301-A Tieton Drive Yakima, WA 98908

> The Catholic Spirit P.O. Box 951 Wheeling, WV 26003

Reign of the Sacred Heart 6889 S. Lovers Lane Hales Corner, WI 53130

Catholic Herald P.O. Box 07913 Milwaukee, WI 53207-0913

Wyoming Catholic Register P.O. Box 1308 Cheyenne, WY 82003

"No single person or group has a monopoly on the defense of life. These are everyone's task and responsibility. On the eve of the Third Millennium, the challenge facing us is an arduous one; only the concerted efforts of all those who believe in the value of life can prevent a setback of unforeseeable consequences for civilization."
– Pope John Paul II – Encyclical Letter "The Gospel of Life" (Evangelium Vitae)

"The February 6, 1994 Message from Jesus – Nancy was discussing with George her many recent visions of black embryos and, occasionally, a white embryo. Jesus then appeared. Jesus said, 'Say to My children this: You must know that abortion is murder. Inhabitants of the earth stop committing murder.'

"Nancy said that the light on the Sacred Heart of Jesus picture was very bright. The clock was chiming as Jesus continued speaking. "Time is running out. Repent, repent, repent or else you will suffer, suffer and suffer. I am the Creator; you are not. I am the Author of Life; you are not.Do not kill who I have created. The commandment of God is: Thou shalt not kill.'

"Why do you remain stubborn and in sin. Come back to Me. Come back to Me. Come back to Me now while there is still time. Sin breeds sin. If you choose the darkness of sin, then, so shall you be in darkness."

"'Man, you shall crawl upon the earth like serpents. You choose this way of life with your own free will. You have taken My gifts and perverted them. You have become selfish.'

"You have filled your heart with hate and you plot evil against each other. Violence will beget more violence. Conflicts will turn into wars.'

"You will battle each other over laws that you create apart from Me. Then so will the earth tremble in many places. The earth will divide. The earth will divide and take away your riches.'

"Some of you will die suddenly. You will have no warning. My Mother has told you: "Prepare, prepare, prepare."

"You have closed your ears. You have closed your hearts to Me. When you have pushed My Mother aside, I tell you, you have pushed Me aside too. My Mother stands with Me."

"When you push God aside, then you shall suffer the consequences. The clock continues to tick. The hour is rapidly approaching when one disaster after another will befall you. There will be fighting everywhere. There will be famine and polluted water in many places."

"Great waves will crash upon your shores and you will experience cold when you should experience warmth. Flood waters will increase in many places. Fire will be upon the earth. You will think that the heavens and the earth have rebelled against you. The clock continues to tick.'

"Know that all that I have told you and more will come to pass. Repent. Repent. Repent. If you have ears, open them. If you have eyes, open them and come back to Me. Please, dear children.'"

http://www.ourlovingmother.org/Messages_Monthly_1994_OurLovingMother.htm

The Prophet As Sentry

"The word of Yahweh was addressed to me as follows, 'Son of man, speak to the members of your nation. Say to them, 'When I send the sword against a country, the people of that country select one of themselves and post him as a sentry; if he sees the sword coming against the country, he sounds his horn to alert the people. If someone hears the sound of the horn, but pays no attention, the sword will overtake him and destroy him; he will have been responsible for his own death. He has heard the sound of the horn and paid no attention; his death will be his own responsibility. But the life of someone who pays attention to the warning will be secure.

"If, however, the sentry has seen the sword coming but has not blown his horn, and so the people are not alerted and the sword overtakes them and destroys one of them, the latter shall indeed die for his sin, but I will hold the sentry responsible for his death.

"Son of man, I have appointed you as sentry to the House of Israel. When you hear a word form My Mouth, warn them in My Name.
If I say to a wicked man: Wicked wretch, you are to die, and you do not speak to warn the wicked man to renounce his ways, then he shall die for his sin, but I will hold you responsible for his death.
If, however, you do warn a wicked man to renounce his ways and repent, and he does not repent, then he shall die for his sin, but you yourself will have saved your life." – Ezekiel 33:1-9

– Joseph Hryczyk Jr. T.O.Carm.

– Joe Hryczyk

AEROSOL TRACKING RADAR RESEARCH

carnicominstitute.org/aerosol-tracking-radar-research/

AEROSOL TRACKING RADAR RESEARCH Posted on behalf of the Chemtrail Tracking USA Message Board by Clifford E Carnicom Sep 04 2001

Citizens are urged to devote increased attention to the anomalous radar images that have been monitored and reported in conjunction with the aerosol operations that are in progress over this nation and the globe. This particular image is representative of those that have been observed by various researchers during the past several years. Special credit is given to the <u>Chemtrail Tracking USA message board</u> and its participants for their alert vigilance in monitoring and reporting on this phenomenon. These observations remain inadequately explained to this date. This image is in animated form, and adequate time for downloading is to be allowed (225K). The radar image map shows a extensive circular and stationary return just southeast of Las Vegas NM. Appreciation is extended to the members of the Chemtrail Tracking USA board as well as others for their continued attentiveness on this aspect of the aerosol operations research. A complete examination and analysis of these events remains a need.



Space Preservation Act of 2001 (Introduced in the House), HONORABLE REP. KUCINICH

carnicominstitute.org/space-preservation-act-of-2001-introduced-in-the-house-honorable-rep-kucinich/



Space Preservation Act of 2001 (Introduced in the House)

HR 2977 IH

107th CONGRESS

1st Session

H. R. 2977

To preserve the cooperative, peaceful uses of space for the benefit of all humankind by permanently prohibiting the basing of weapons in space by the United States, and to require the President to take action to adopt and implement a world treaty banning space-based weapons.

IN THE HOUSE OF REPRESENTATIVES

October 2, 2001

Mr. KUCINICH introduced the following bill; which was referred to the Committee on Science, and in addition to the Committees on Armed Services, and International Relations, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To preserve the cooperative, peaceful uses of space for the benefit of all humankind by permanently prohibiting the basing of weapons in space by the United States, and to require the President to take action to adopt and implement a world treaty banning space-based weapons.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the `Space Preservation Act of 2001'.

SEC. 2. REAFFIRMATION OF POLICY ON THE PRESERVATION OF PEACE IN SPACE.

Congress reaffirms the policy expressed in section 102(a) of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2451(a)), stating that it `is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind.'.

SEC. 3. PERMANENT BAN ON BASING OF WEAPONS IN SPACE.

The President shall-

(1) implement a permanent ban on space-based weapons of the United States and remove from space any existing space-based weapons of the United States; and

(2) immediately order the permanent termination of research and development, testing, manufacturing, production, and deployment of all space-based weapons of the United States and their components.

SEC. 4. WORLD AGREEMENT BANNING SPACE-BASED WEAPONS.

The President shall direct the United States representatives to the United Nations and other international organizations to immediately work toward negotiating, adopting, and implementing a world agreement banning space-based weapons.

SEC. 5. REPORT.

The President shall submit to Congress not later than 90 days after the date of the enactment of this Act, and every 90 days thereafter, a report on–

(1) the implementation of the permanent ban on space-based weapons required by section 3; and

(2) progress toward negotiating, adopting, and implementing the agreement described in section 4.

SEC. 6. NON SPACE-BASED WEAPONS ACTIVITIES.

Nothing in this Act may be construed as prohibiting the use of funds for-

(1) space exploration;

(2) space research and development;

(3) testing, manufacturing, or production that is not related to space-based weapons or systems; or

(4) civil, commercial, or defense activities (including communications, navigation, surveillance, reconnaissance, early warning, or remote sensing) that are not related to space-based weapons or systems.

SEC. 7. DEFINITIONS.

In this Act:

(1) The term `space' means all space extending upward from an altitude greater than 60 kilometers above the surface of the earth and any celestial body in such space.

(2)(A) The terms `weapon' and `weapons system' mean a device capable of any of the following:

(i) Damaging or destroying an object (whether in outer space, in the atmosphere, or on earth) by-

(I) firing one or more projectiles to collide with that object;

(II) detonating one or more explosive devices in close proximity to that object;

(III) directing a source of energy (including molecular or atomic energy, subatomic particle beams, electromagnetic radiation, plasma, or

extremely low frequency (ELF) or ultra low frequency (ULF) energy radiation) against that object; or

(IV) any other unacknowledged or as yet undeveloped means.

(ii) Inflicting death or injury on, or damaging or destroying, a person (or the biological life, bodily health, mental health, or physical and economic well-being of a person)–

(I) through the use of any of the means described in clause (i) or subparagraph (B);

(II) through the use of land-based, sea-based, or space-based systems using radiation, electromagnetic, psychotronic, sonic, laser, or other energies directed at individual persons or targeted populations for the purpose of information war, mood management, or mind control of such persons or populations; or

(III) by expelling chemical or biological agents in the vicinity of a person.

- (B) Such terms include exotic weapons systems such as-
- (i) electronic, psychotronic, or information weapons;
- (ii) chemtrails;
- (iii) high altitude ultra low frequency weapons systems;
- (iv) plasma, electromagnetic, sonic, or ultrasonic weapons;
- (v) laser weapons systems;
- (vi) strategic, theater, tactical, or extraterrestrial weapons; and

(vii) chemical, biological, environmental, climate, or tectonic weapons.

(C) The term `exotic weapons systems' includes weapons designed to damage space or natural ecosystems (such as the ionosphere and upper atmosphere) or climate, weather, and tectonic systems with the purpose of inducing damage or destruction upon a target population or region on earth or in space.

A LEADING CAUSE OF DEATH

carnicominstitute.org/a-leading-cause-of-death/

A LEADING CAUSE OF DEATH Clifford E Carnicom Nov 03 2001 Edited Nov 19 2001



The mortality statistics for 1999 have been released by the Centers for Disease Control on June 26 2001.

Four questions result from that release:

1. Why is one of the 5 leading causes of death now "Chronic lower respiratory disease?"

2. Why was the former leading death category "Chronic obstructive pulmonary diseases and allied conditions" changed for the 1999 data to now read "Chronic lower respiratory disease?"

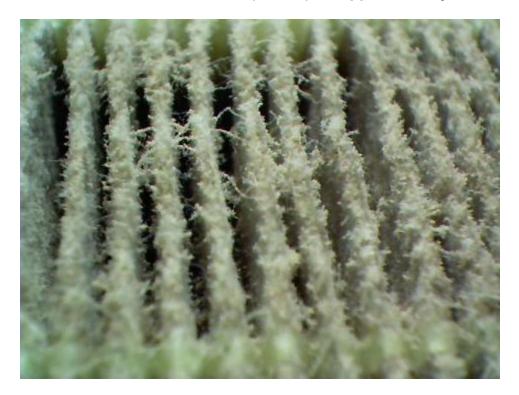
3. When is the data for the year 2000 to be released?

4. Is the released data verified by independent sources?

Readers may wish to review the results of recent HEPA filter use comparisons below:



HEPA Filter in residential service(indoor) for approximately 3 weeks.



HEPA Filter in residential service(indoor) for approximately 6 weeks.



New HEPA Filter for comparison

CDC Reference

A Response Received to this Posting

THE PLASMA FREQUENCY: RADAR APPLICATIONS

carnicominstitute.org/the-plasma-frequency-radar-applications/



THE PLASMA FREQUENCY: RADAR APPLICATIONS Clifford E Carnicom Nov 05 2001

An analysis now exists to indicate that one of the primary applications of the aerosol operations is likely to involve the advanced use of radar technology for military purposes. Citizens may recall that this application was brought forth several months ago from unnamed sources; this current study substantiates that earlier disclosure through the processes of observation, analysis and deduction. Enhanced electromagnetic propagation of various energy forms, previously undefined as to specific wavelengths or frequencies employed, has been at the forefront of research by this author for some time now.

Although I do not, in any fashion, claim to be highly versed in plasma physics, this field has been an important topic of research for the past year in conjunction with the analysis of the aerosol operations. A plasma is an ionized gas consisting of ions and free electrons distributed over a region in space. The effect of the aerosol operations can lead to no other logical conclusion except that the lower atmosphere itself has been altered to a plasma state. Previous research over a substantial period of time within this site will support this finding. An alternative interpretation of a plasma is that of an electrically conductive gas. In this case, the 'gas' employed is the atmosphere. An artificial ionosphere has been, in effect, created within the lower atmosphere. It may also help to mention that a neon, or fluorescent light, is a familiar visual example of plasma physics.

Within the field of plasma physics, concentrated attention must be devoted to what is known as the 'plasma frequency'. The plasma frequency can be considered as a *resonant* frequency of the ionized gas. The magnitude of this frequency has highly significant ramifications with respect to the propagation of electromagnetic energy through the ionized gas. Take, for instance, the following elaboration by Richard Feynman, within Lectures of Physics, Vol II:

"This natural resonance of a plasma has some interesting effects. For example, if one tries to propagate a radiowave through the ionosphere, one finds that it can penetrate only if its frequency is higher than the plasma frequency. Otherwise the signal is reflected back. We must use high frequencies if we wish to communicate with a satellite in space. On the other hand, if we wish to communicate with a radio station beyond the horizon, we must use frequencies lower than the plasma frequency, so that the signal will be reflected back to the earth."

A difficult problem facing this researcher is how to arrive at the specific frequencies that are expected to be employed when provided with remote and limited data. Formal authorities and agents of the public welfare, including the national media and environmental organizations, have demonstrated a complete and total refusal to confront the numerous demands by the public for an accounting of, and an informed consent to, the affairs overhead.

In order to arrive at the plasma frequency for the current state of the atmosphere, it is essential to determine an estimate for the electron density of the atmosphere under its current and altered state. The plasma frequency is intimately dependent upon the electron density; it is, in fact, proportional to the square root of this electron density. Determination of the electron density of the lower atmosphere(altered) has been a relatively difficult problem to approach with limited resources and the methods of analysis alone. It is thought that a satisfactory estimate of that electron density level can now be achieved. This work will show itself to be dependent upon earlier sustained research on the subject of particle density estimates within the atmosphere. This work is presented on the page entitled <u>Air Data Scrutiny Now Required</u> presented elsewhere on this site.

As an opening example, let us consider an estimate of the plasma frequency for the ionosphere. The ionosphere is a rather classic example of a plasma state, and is of tremendous importance to radio communications because of the properties of reflection of waves as has been mentioned earlier. There are several forms of equations available that involve plasma frequency determination, e.g., see Introduction to Modern Optics by G. Fowles 1975, Theoretical Physics by G. Joos, 1986, Lectures of Physics, Feynman 1964, Theory of Electromagnetic Wave

Propagation by Papas 1988, Optical Physics by S.G. Lipson 1995, The Electromagnetic Field by A. Shadowitz 1975, Physics of Waves by W. E. Elmore 1969 and others.

The form which is most convenient and simple to use at this point is:

 $w_p^2 = N (q_e)^2 / (E_o m)$

where w_p is the plasma frequency in radians, N is the number of electrons per unit volume, E_o is the permittivity of free space, q_e is the charge of an electron and m is the mass of the electron. The following values are available:

q_e = 1.6E-19 coulomb

E_o = 8.85E-12 farad-meter⁻¹

m = 9.11E-31 kgm

A value for N, the number of electrons per unit volume for the ionosphere is available from the University of Leicester, on a web page entitled <u>lonospheric Physics</u> (valid 08/19/01). It will be seen that representative values for the electron density of the ionosphere range from approximately 1E2 to 1E6 electrons per cubic centimeter. For this example, let us use a rather representative value of 1E5 electrons / cm3.

Using these values in the above equation,

 $w_p^2 = (1E11 (e-/m^3) * (1.6 E-19coulomb)^2) / ((8.85E-12 farad-meter^{-1}) * (9.11E-31kg))$

or

w_p = 1.78E7radians

and dividing by 2 * pi for cycles/sec

w_p = 2.83Mhz.

This value is quite realistic and representative of what is known as a critical frequency (peak plasma frequency) of shortwave (high frequency) radio communications. Ionosonde measurements (measurements of ionization levels of the atmosphere) typically depict a value as has been determined above; please refer to <u>Basic</u> <u>Ionosonde Theory</u> (valid 07/28/01) for additional information.

The plasma frequency of solid metals can also be determined by these same principles. Electron density within metals is also known, and the plasma frequency of solid metals can also be determined. It is of more than passing interest that the plasma frequency of a solid metal is also related directly to its 'transparency' with respect to the electromagnetic frequencies to which it is subjected.

The problem of estimating the electron density of the altered atmosphere poses several difficulties, as some estimate of the concentration and type of the aerosols which have been injected into the atmosphere will be required.

Readers may now wish to refer to an <u>earlier presentation</u>, where such estimates of particulate concentration levels have been presented. It may be recalled that an extremely conservative approach to this problem was taken, with an end result of approximately 60 micrograms / cubic meter (EPA limit 50 : PM<10) being arrived at through a reasoned analysis and synthesis of observations. In addition, assume a baseline value of 39 micrograms cubic meter from the reference data of the interval 1996 – 1998; this value is taken from an <u>additional study</u> of particulate matter. Assume, therefore, a difference of particulate matter on the order of 21 micrograms / cubic meter from the referent example that we are using magnesium as a primary constituent of the aerosol particulate matter.

In a manner similiar to R. Feynman, within Lectures on Physics Vol II, subsection entitled, *Low Frequency and high-frequency approximation; the skin depth and the plasma frequency*, let us assume that there is one free electron per atom within the particulate material under analysis. This now leads to an estimate for N as:

N = ((60E-6 gms / m^3) – (39E-6 gms / m^3) * 6.02E23 (Avogadros No.)) / (24.3 gms / mole of Mg)

N(estimate) = 5.20E17 electrons / m³

Notice that this estimate is significantly higher than the magnitudes expected within the ionosphere itself.

Determining the plasma frequency for this electron density, we have:

 $w_p^2 = ((5.20E17 \text{ e-} / \text{m}^3) * (1.6E-19)^2) / ((8.85E-12) * (9.11E-31))$

which leads to an estimate of the plasma frequency of the altered atmosphere of:

w_p = 4.06E10radians

or

 $w_{p} = (6.46E9)Hz$

The significance of this frequency value is that it represents the upper end of radio waves, i.e., radar waves within the electromagnetic spectrum. Based upon the earlier discussion, it is therefore expected that the altered atmosphere medium is conducive and beneficial to the reflection, propagation and/or the ducting of radar waves(as well as lower frequencies) over long distances. This strongly suggests that a significant application of the aerosol operations may well involve that same enterprise, i.e, the propagation of radar waves (as well as lower frequencies) over extended distances. There are numerous military and electromagnetic propagation applications that become evident from this finding. Any modifications to this presentation will be made as is appropriate.

Clifford E Carnicom Nov 05 2001

A RESPONSE RECEIVED TO: A LEADING CAUSE OF DEATH

carnicominstitute.org/a-response-received-to-a-leading-cause-of-death/



A RESPONSE RECEIVED TO: A LEADING CAUSE OF DEATH Received by email Posted on behalf of the sender Nov 19 2001

Dear Mr. Carnicom,

Here are some answers to the questions you posted on your web page: <u>http://www.carnicominstitute.org/articles/cdc1.htm</u>

1. Why is one of the 5 leading causes of death now "Chronic lower respiratory disease?"

In short, this is a reflection of Americas aging population, fewer deaths from infectious disease, decreased traffic fatalities, improved treatment or coronary diseases, and the fact that there are/were many active smokers. In the US, more than 80% of COPD or chronic lower respiratory disease is attributible to smoking. The remainder are the result of infectious agents, occupational exposures (silicosis, asbestosis etc), genetics and idiopathic disease (cause unknown.). In third world contries where heating and cooking is done by biomass fuels the rate of disease is very high; estimates of up to 400,000 deaths/year may be attributed to this cause. The common name for the disease is "Hut lung".

2. Why was the former leading death category "Chronic obstructive pulmonary diseases and allied conditions" changed for the 1999 data to now read "Chronic lower respiratory disease?"

This change is simply the result of the 10th Revision of the International Classification of Diseases. The ICD is an international standard for disease reporting. By establishing common disease criteria across nations, world-wide trends can be better interpreted. COPD was actually more restrictive than the new category which includes the following conditions:

J40 Bronchitis, not specified as acute or chronic
J41 Simple and mucopurulent chronic bronchitis
J42 Unspecified chronic bronchitis
J43 Emphysema
J44 Other chronic obstructive pulmonary disease
J45 Asthma
J46 Status asthmaticus
J47 Bronchiectasis

3. When is the data for the year 2000 to be released?

Preliminary data for the year 2000 can be found in this report:

http://www.cdc.gov/nchs/releases/01news/mort2k.htm

4. Is the released data verified by independent sources?

The annual reports from NCHS are compiled from reports from local and state health departments, and state death certificate data. These reports are required by law at the sate and federal levels. Reports are edited and peer-reviewed by state, federal, university and other qualified public health professionals.

http://www.cdc.gov/nchs/about/major/dvs/mortdata.htm

I hope you find this information helpful in your studies.

Best Regards,

The senders name will be withheld until permission is granted or a request for inclusion is made by the author.

No affiliation was included with this response.

JEFF RENSE INTERVIEW with CLIFFORD CARNICOM AEROSOLS and ELECTROMAGNETISM

Carnicominstitute.org/jeff-rense-interview-with-clifford-carnicom-chemtrails-and-electromagnetism/



JEFF RENSE INTERVIEW with CLIFFORD CARNICOM AEROSOLS and ELECTROMAGNETISM Nov 27 2001

Jeff: Hi again, and welcome back. I wish I had a dollar- well, even ten cents- for every email I've received dealing with the chemtrail issue. And I'm not like our guest tonight, Clifford Carnicom, who has spent so much so much of his life pouring over data and poking his nose, and his intelligence, and his wisdom into this most perplexing of problems that has been with us now for a little over three years. This chemtrail phenomenon has caused friendships to break apart, probably caused marital strife that we'll never understand the extent of; it has caused arguments, it has caused heartache. But more than that, it has caused apparently illness, poor health and- I'm sure- more than a couple of cases of terminal illness in people whose immune systems have been compromised going into this thing or were dragged down by whatever has been going on.

For those of you who have seen them, you know what I'm talking about. For those of you who haven't, I would urge you to go to Clifford Carnicom's website: it is www.carnicom.com. Click on "Chemtrail Crimes and Cover-up Documented", and start reading. But before you start reading, look at the pictures. Prepare to be amazed.

And then maybe things for those of you haven't really noticed chemtrails before will start to fall into place. You'll remember that: "Gosh, gee, I did see something like thatand this is what it was?" Yes- this is what it was. And back tonight for an update on this most perplexing, and at times, certainly enraging of apparent government operations being

conducted in this country, over our heads and into of our bodies, is Clifford Carnicom himself. Welcome back Clifford. How are you?

Clifford: Good evening Jeff- very well, and thanks very much for the opportunity to speak with you again. I know it has been a little while.

Jeff: Sure. Well, a lot has been happening. And you have, again, at your own time and expense, been working this issue as much as any human being could do. We know chemtrails are real. We don't know exactly what's going on- if in fact there is one program underway; maybe: there may be several. We just don't know. Clifford Carnicom's data

on the website is overwhelmingly compelling. We are going to talk about much of that tonight and we're going to focus on the electromagnetic, the EMF aspect, of what may be involved with this most visible of phenomena. Clifford, what's been going on lately, in the last month or two? Have reports stayed the same as we've headed into late fall and approaching winter, or is there a change?

Clifford: In terms of general character- at least from the sense I have from reports as well as locally- after Sept. 11 events, the skies were refreshingly clear, I would say, for probably two weeks to three weeks. About a three week period elapsed, and then it almost seems as if all hell broke loose because things got real heavy for the month or two

after that.

Jeff: That's true.

Clifford: So whether you're dealing with a make-up situation for lost time – that might be one question – I would certainly say there has been no decrease in the level of the program, other than there was a hiatus due to a national event of that magnitude and particularly involving aircraft.

Jeff: Sure. I remember the e-mails pouring in from people in the Portland, Oregon area saying they had never been sprayed harder and more often than they were, as you say, several weeks after September 11th when the program was reapplied, as it were, to the landmass of the continental U.S.- and of course to other areas around the world. It's not just here.

Clifford: Right. You know, one of the reasons I wanted to speak – and I really appreciate the opportunity – is because I really haven't had time to keep up with all the material posting on the website. There's been some material which at least appears to be consolidating or converging towards some centralized theme, but I'm simply not able to keep up with it on the website. And I thought it would be helpful, at least, to get the new material out there for people to begin investigating for themselves, and to potentially set some directions for further research and activity and activism by people.

Jeff: Yes. That's one thing that's important to remember always: that Clifford is asking for your help. If you want to become involved in this, the more the merrier, and the better we can approach this subject. With more data, more people looking, and Clifford always happy to help. His website, again, is a treasury of data and will open the door for many of you who want to take this a little bit further.

Quickly, though, back to September the 11th and shortly thereafter, Clifford, I had a number of e-mails from people who reported there were some spraying activities underway when the skies were supposed to be clear of commercial traffic. Did you get many reports about that?

Clifford: I certainly encountered the reports. I know there was some satellite imagery that people had referred to. I think it's unfortunate, but this is one of the cases where you see the results of never having had a centralized network on this- and that's very deliberate- where everything is operating on a grass roots level, in order to bring attention. But that's an occasion when, if there was an organized framework in place, that would have been an opportunity to document the events that were occurring. I think as it is, again, we are faced with fragmentary, grass roots, isolated accounts – but exactly to that effect in some areas. That wasn't the case here in Albuquerque by any means, or Santa Fe. The skies were conspicuously clear for several days and really up to a couple of weeks after: very light air traffic.

Jeff: I saw recently, again, another aircraft, too high for me to identify. But it was spraying along, and then turning it off and turning it on just like a skywriter would. It's amazing when you see it. It would make a believer out of many, many people. And it has, in fact, when you watch that going on.

Clifford: Right. And the help that I'm speaking of, referring to, is really beyond you know the point of someone simply sitting there observing that. Truly there's been a legitimate need for professional, what I would call professional involvement and assistance for some time now, and I think that will only be accentuated tonight. This is a very serious issue and there is a need for professional involvement in very highly technical fields and well as medical fields and chemistry and this type of thing.

Jeff: Correct. You know, to tie this in- and I really don't know how to do it very adroitly at this point in time...but to look at what has happened in the country politically since September 11th in terms of the restriction of our freedoms, the basic nullification of, certainly, portions of the Bill of Rights by the anti-terror or Patriot bill, which was passed — and I again want to remind you – by the House of Representatives without even having seen that bill in print, friends. Shame, shame, shame on the men and women who voted for that without even having read it. But I don't know ultimately if we'll find a linkage or not. I just don't know. But I do know that whoever is doing chemtrail operations in deploying whatever it is they're deploying, are in some way at some level connected with the so-called shadow government that is really pulling the strings behind this country.

Clifford: Yes, and the word 'complicit' I guess has to come to mind at some point, from my side. I guess if we have the luxury, there were a couple points I wanted to mention before we got into the main directional topic, very much related to what you're speaking of. And that is that I did want to bring attention to a page you posted about a week ago, roughly. When I saw that page, to me it was immediately apparent that it was important enough to present it at the top of my site. And that is the page that related to the FBI flyer on the U.S. Constitution, if you recall that. I think every citizen in the country needs to be aware of what has happened – in this case, from a law enforcement point of view – that has literally classified individuals who defend the U.S. Constitution, and/or make numerous references to the U.S. Constitution, as a terrorist threat. I think that's a sad state of affairs, and it shows a mindset which we all need to be aware is in place. If you recall, one of the shows that you and I did was devoted almost exclusively – or at least in large measure – to constitutional issues.

Jeff: Correct.

Clifford: So, by no means will I exclude myself in any way, and I hope that all American citizens will not exclude themselves, and will consider themselves to be defenders of the U.S. Constitution. I hope that we are all intimately familiar with that document, and become more so than we are now. I will continue to make numerous references to the U.S. Constitution, and I will continue to defend the Constitution. I think it's a gross injustice to the American people that such a flyer by a national law enforcement agency was ever even presented.

Jeff: It was in fact created by the Phoenix FBI office and circulated to all law enforcement in the state of Arizona. It made its way around the country. This happened actually several years ago, subsequent to the Oklahoma City bombing. But as Clifford said, the mindset was in place. And now, when you look at the new definition of what they

called "domestic terrorist" or "domestic terrorism", you really start to worry. And if

you're not worried, you're misinformed, and you'd better catch up real quick. Be right back with Clifford Carnicom in just a minute. I'm Jeff Rense, glad you are here, and please do visit my website for real news, all the time, at www.rense.com.

Break

Jeff: Once again, the website to bookmark and continue to go back to and take your friends: www.carnicom.com, and look for the Chemtrails Investigation that has been so beautifully presented over such a long period of time. Heroic is my term for the work that Clifford has done for all of us in trying to bring the truth forward to what is being done over our very heads. Okay Clifford, go ahead, and let's get into it.

Clifford: Thanks, Jeff. Do we have a couple of hours tonight, do you think?

Jeff: We have a total of three hours. I've given you the whole program.

Clifford: Okay, at least I don't need to rush within an hour or so.

Jeff: No no, we've got until 10:00 Pacific, 1:00 Eastern.

Clifford: Okay, thanks. We'll see how that develops. The second item is a small item to catch up with, but it's not

any less important, in terms of timing. I looked up today and I see that we spoke on the 20th of June. I think that

was the last time we spoke.

Jeff: That long ago? Wow!

Clifford: Five or six months ago, right. So, there have been some things that have transpired in between. I'm going to try to catch up, and build up into the main topic of electromagnetics. (First): a small item, but important, on the EPA, the Environmental Protection Agency. If you recall, there was a rather extended chronology of a sample of

materials sent to that agency- to the head of the agency; that material being sent by certified mail, that material not being acknowledged to exist by that agency, and no reference to it whatsoever. Even though it was physically known to have been accepted.

A year and a half transpired. On the day that we spoke last time, June 20th- I wasn't aware of it at the time- but on that day the EPA issued a letter, which I posted on July 5th of this year. In that letter, after a year and a half of no acknowledgment, no action whatsoever, on a request to have that material identified, the EPA sent a letter basically disavowing any interest, any obligation, or any responsibility to identify that sample. Their keystone sentence in that

letter is the following. I don't think we covered this, that's why I'm bringing it up. The

statement is: "We would like to take this opportunity to inform you that it is not the policy of this office of the EPA to test or otherwise analyze any unsolicited samples of material or matter." A very interesting statement, if you look at that.

Jeff: Unbelievable!

Clifford: First of all- "policy". Really, I have no interest in policy. I have interest in obligation and law.

Jeff: Unbelievable!

Clifford: And their duties to the public.

Jeff: It seems to me they are a public servant, aren't they, Clifford? Isn't that sort of what they are all about?

Clifford: That was my understanding. I worked for the federal government for 15 years, and that was certainly my understanding when I worked there. The other interesting word in that sentence is the use of the word "unsolicited"'. Meaning that unless they ask for it, they have no obligation to identify unknown material that is of concern to citizens for their health and their environment.

Jeff: I wonder if that pertains to anthrax?

Clifford: Right, exactly. So for the sake of continuity I wanted to make this action known to the public, and also to re-emphasize the fact that a year and one half elapsed before they responded to this. And by the way, if you look into that response, it apparently was due to a Freedom of Information Act filed by a third party. So they apparently

decided they didn't want their hands on this material anymore.

Jeff: It's critically important to underscore the fact that this note from the EPA is not negligence, it is not incompetence – this is part of the cover-up, another example, in what you just heard Clifford read, of how the government is no longer serving us- we are serving it. At least that's how the bureaucracy seems to look at it.

Clifford: That correspondence is all available on the site for people to read for themselves- the certified mail and the whole story.

Jeff: Pass it around and whatever.

Clifford: The whole story is there. With that taken care of, the next topic that emerged was in the end of July. Funny how it takes so long sometimes to do what seems to be obvious in retrospect. But in terms of this sampling, it's very difficult for lay people to get their hands on aerosol material that apparently is down to sub-micron to micron

range.

It's very, very small. Air filters have been used- there has been some work with HEPA filters. But for whatever reason, I took up the idea of collecting rainwater and distilling this rainwater: basically concentrating rainwater samples.

And that was done for several months in the middle of the summer. In June we were getting a lot of rain. I presented a page on this, and I guess the simplest thing I can say is that people should look at these photographs: the page starts with "Rainwater Metals". In the end I'd use a quart or about a liter and cook it down to just a few milliliters. But they started out being about 40 milliliters, down to about 3 milliliters: about a 10-to-1 concentration. And it absolutely astounded me when I started to see what was residual within this rainwater.

Jeff: May I ask how you reduced it, just for our listeners, so they understand how you would bring that down, from 40 down to 3?

Clifford: Sure. I did it by distillation. I simply hooked up a very simple distillation setup in a flask, heated that water, and drew the water out the top where it cools down. The process of distillation in its simplest form is what I used. I drew off the water: heated underneath with an oil lamp, an alcohol lamp, the water eventually will evaporate.

Jeff: You grabbed that moisture and condensed it back down. All right, we're going to find out what was in that water. And this is called "rainwater", friends. Remember when you were a kid and we all used to go outside and open our mouths and let the raindrops go in? Or maybe we'd do that with snow. You might not want to do that quite so readily anymore when you hear what Clifford has found in rainwater falling all over these United States. Be right back in just a minute with Clifford Carnicom.

Break

Jeff: OK, right back with Clifford Carnicom, who is explaining how he reduced rainwater down to a workable quantity through distillation. Real simple- OK, we've got that Clifford- go right ahead.

Clifford: Yes, and understand Jeff that the purpose here was not to collect the water. It was to collect the solid materials that exist within the water. So, the simple counterpart is simply to boil the water off. The reason I was distilling it is that I didn't want it to be contaminated in any way, so I just kept it all sealed. In essence it's quite simple, quite evident, and quite plain: there is a tremendous amount of metallic material that shows up in this

rainwater. You don't need a PhD to tell you that what is found here is metal. The photographs are there.

Actually what's going on is that you're just seeing things over and over from different angles. But this is such a simple technique. It was very sad to me when I saw this because the amount that is in there is really amazing to me. If you check the ph of this material, it's extremely alkaline. This fits with the rainfall samples done months prior to that, that involved the whole nation, taking tests. It's simply there. There are two photographs there, very clear, for people to see, I've prepared a video of it so that people could have the benefit of motion if they want it. It takes a little while to download, because I wanted the quality of the imagery high enough. But it's just evident and clear as can be. I have air filter samples that were done over the last year and a half. They say the same thing. You have three or four things, saying it over and over and over. Here you can just plain see it. Several months ago I also took straight rainwater, and after it settled, allowed that to crystallize. I had the same thing occur in terms of the presence of magnesium, apparently- to my best identification- showing up. So, this is simply a simple method. This was also repeated by another individual. It's amazing how few professionals seem to make themselves available for the work that needs to be done in the testing.

Jeff: Yes. We've got tens of thousands of people at the university level and outside of that who could step in here and verify, quantify, and help you assay all these materials – in their own geographical locations, with no trouble at all. And yet, so few do.

Clifford: Absolutely. And it's not even so few – it's none, apparently. Unfortunately. There are no formal tests that anyone will step up to the plate and perform publicly.

Jeff: Even some of the skeptics you'd think would step in and say: "I'm going to prove this guy wrong."

Clifford: It's all open. There's a lot of talk that goes around, but it's all open, and nobody conducts the tests. Whether it's the federal government, whether it's professional citizens, whether it's universities – nobody will conduct the tests. You have to ask why.

Jeff: That's that great malaise that they're counting on, that somnambulant state of American culture.

Clifford: The obfuscation and distraction that takes place is incredible, when it's very simple: The material is just there. We had another citizen on the east coast by the name of lookinup who's actually done some pretty amazing work also. That's a pseudonym for her on the message board. This individual performed the same tests in her area and got identically the same results, and was equally astounded and amazed as to what she found on the other side of the country. So, continuously over a long interval of time, we have the same data showing up, over and over and over. And that is the presence of metallic particulate matter in the atmosphere, in extraordinary

amounts. It's up to you whether you want to take a look it, but the fact is it's there. You can see it and do the work for yourself if you

have doubts, or feel the need to test any further, which we all do. This is rather an important junction point, because there is a certain time that it registers in the mind. You're not dealing with an air filter, where it's really hard to see this material. It's just plain there.

So, over the next month or two I was taken in a different direction and it became much more an analytical approach. It was the problem of saying: All right, we know the material is there. We've got to try to get a handle on how much is there.

Jeff: Before we do that, Clifford, can you tell our listeners a little bit more about what it was you found in that sample?

Clifford: Yes. About this discussion, there's a whole set of succeeding photographs that were taken under the microscope.

Jeff: We've got a lot of folks who aren't on-line. I don't want to leave them behind.

Clifford: What I did, again, from the lay point of view, was that under the microscope I did the best work that I was able to do. I performed a series of chemical tests to try and identify this material to the best of my ability. Like I say, I invite all others to perform their own tests. The results of my work are through fairly common and simple reagents that are available, and my studying chemistry books and such. My best analysis thus far is that it appears to be magnesium: I actually end up with a magnesium oxide. If you remember that this material was heated in a test tube, it's not a surprise at all that if you have a metal, an oxidized form is going to take place. My best analysis of the dominant material is that it appears to be a magnesium oxide. Like I say, the professionals can come in and do their work, but that's what I end up with.

I also end up with a pretty strong case for the existence of aluminum. You have to look at the photographs and make your own judgment, but these materials have unique shapes. Aluminum is interesting. In the books I have on aerosols, the mechanics of aerosols show it as a spherical particulate shape, which is a little bit unusual. Most of them are not. Mostly things are cubic or hexagonal or whatever, but this spherical shape is listed as a photograph for aluminum. There is a set in there that shows these things. Sulphuric acid appears to make it the most visible. It's almost transparent. But if you look at those photographs under a microscope, you'll see these spherical shapes.

They measure about two microns in size. It's incredibly small. There are a lot of them there, but visibility is very difficult. Sulphuric acid seems to enhance and isolate it, and there's a great deal of it in there. All I can say is: My work indicates the strongest

candidates for further examination and identification would be magnesium compounds and aluminum compounds.

Jeff: And we're talking, again, about aluminum down to viral size.

Clifford: Yes, incredibly small. It's very difficult with my equipment to get that magnification but I did, I got it up to 2000X with the equipment I use.

Jeff: Well, amazing work. Okay, and it's all online for you if you have an interest in this and you'd like to take this to professional or lay people and say, "Here it is. What do you think of it?" We would encourage you to do that. It's all at www.carnicom.com. Be right back.

Break

Jeff: I got a nice e-mail from George. I won't identify him by last name, but thank you, George. Let me read this, Clifford:

"Hi Jeff, I was surprised to see the rainwater metals video on Mr. Carnicom's page. I did the same thing here in Alberta, Canada last summer after three days of heavy chemtrail activity. Here in Alberta it rains like clockwork every evening during the summer. I evaporated mine off using a vacuum pump down to one-half atmosphere, to prevent the heat from making any chemical changes. I had the sample analyzed by a colleague at the university where I teach. The results were astounding: from aluminum oxides, barium oxides and hydrates, titanium carbonates, alum, to long-chain polymers, it was considered by my colleague to be quite toxic in the concentrations I had distilled it down to. That would be 10,000-to-1, one liter down to .5 ml. I have HEPA filters in all my rooms now. I'm going to follow this research up next summer with lake and river samples. I suspect I will find similar, if slightly less concentrated, forms. Thank Mr. Carnicom for his work. We need more people like him to wake people up.

George."

Thank you very much, George, for that. And I'll send this to you, Clifford, for your files.

Clifford: I'd like the full statement. I appreciate that very much, because part of the game is to corroborate things from different sources. I can simply say from a lay level in summary, from numerous methods and sources over several years now, what appears to be our primary candidates for examination. These would be at least four metals: barium, magnesium, aluminum, and calcium. In addition, apparently the polymer fibers are another whole separate topic worthy of discussion.

Jeff: This can't be just jet exhaust accumulating at the higher levels.

Clifford: No, the fact is: it's there. At some point we have to get plain and simple, and the fact is, the material's there. It's been injected into the air in large quantities.

Jeff: Got it.

Clifford: And it's having its effect. You know, people can play their games for years, but at some point we're going to get past that also, and get behind the driving agenda of this program. But each of us does have to go through that process of education ourselves. I'm simply saying in my case it's time for more detailed work, and for the nation to decide what it's going to do about this.

Jeff: The nation meaning you and I and all the wonderful people listening in. Let me read that one paragraph again from this e-mail, just to underscore what George has found. He said: "I had the sample analyzed by a colleague at the university where I teach. The results were astounding. From aluminum oxides, barium oxides and hydrates,

titanium carbonates, alum, to long-chain polymers, it was considered by my colleague to be quite toxic in the concentrations I had distilled it down to. I have HEPA filters in all my rooms now." So, there it is: You don't want to be drinking rainwater, folks. It's not what it used to be, as they say.

Clifford: And unfortunately you have to now extend your considerations to the environment, and what the effects are to the environment. If it's toxic to drink it's not necessarily so hot for our world, as well.

Jeff: Exactly. We've got to stop thinking in little compartments. It's all one piece, folks. And if it's in the rain, it's in the rivers, it's in the lakes, it's on the land, it's in the plants, it's in our food: it's everywhere.

Clifford: Thanks for bringing that up, as well as examination of the specific materials. It's interesting, where that led. That was a very important part to talk about- the identification I've been able to make, and the subsequent corroboration from other sources and other locations.

The next topic to turn to, very analytical work, is basically all pretty much theoreticalbased on observation, empiricism, deduction, and analysis. It was the question: all right, since we know the material is in the air now – no need to play that game forever – how much is there? So, the desire was to try and come up with some kind of quantitative estimate as to how much is there. And that ends up being a very difficult problem, because we don't have anybody out there measuring it. It's very simple if you have the right support and equipment and people behind it. Jeff: Sure.

Clifford: Equipment exists for particulate counts and this type of thing, but I don't have it. Mostly what I have is my mind, and I have to try and solve the problems as best I'm able to. This one was another session of pretty serious and extended thought, and in the end, the problem centered around visibility. It's pretty interesting that in the end things are really quite simple. It's a matter of getting to them in the right way. But there is a direct relationship between visibility in the air and what is called the extinction coefficient. I use terms in math- and I'll always try to explain it in a couple of ways – but I do want to get the terms out and the numbers out, so that people know the

legitimate research does need to be done.

There is a quantity called an extinction coefficient. Basically, it stems from the idea of the attenuation of light. If you send a beam of light through particles, that beam of light will be attenuated. It will be attenuated in an exponential form. And the magnitude by which it attenuates or decreases is expressed through a quantity called the extinction coefficient. I started to look into this, and basically to learn about it, and see how it can relate towards trying to come

up with an estimate of the amount of materials in the sky. One of the first interesting things was how difficult in general it has always been for me to get hold of some databases that I think should be available.

There is a device called a nephelometer. I've never seen one; I can only read about it, thus far. It is a device which measures the extinction coefficient. So, I started looking around and researching for databases. I found all kinds of information telling about what it is, and that such things are being measured by numerous people. Numerous government agencies are measuring these particles all the time. But then when I tried to find databases I found them very difficult to find. I couldn't get the raw data. By data I mean current, real-time data on measurements that are being taken by official sources. After quite a bit of looking, and coming up pretty much empty with respect to real, hard-core, raw data, I found one source. The University of Maryland had their data up on the Net. So I started to

look at the actual numbers that were there. And these numbers were concurring with the visibility situation, and the deterioration of visibility, that we find ourselves in. There's a whole separate topic that you and I have already discussed, I think, regarding the change in the visibility standards from 40 miles to 10 miles.

Jeff: Oh, yes.

Clifford: The fact that in a clear desert environment you can easily see 90 to 120 miles, and we have visibility commonly being reported at 10 miles- in fact, a maximum being set at 10 miles. It's actually ludicrous and absurd for people to say that the visibility conditions of our atmosphere have not changed dramatically over the last three years in direct correlation to these aerosol operations.

Jeff: Exactly.

Clifford: Again, as with the rainwater metallic particulates, it's a matter of at what point do you wish to accept it. We have mountains here: a big set in Albuquerque about 50 miles away and another set 20 miles away. You ought to be able to see these, and double. And we have many, many cases where you literally can barely see these mountains 20

miles away now.

Jeff: Friends, this is not smog. We're not talking smog here. Let's get that straight.

Clifford: Not at all- the stuff is just there. I mean, it's that simple. And so my question is: How much is there? The one data source I found was, sure enough, corresponding exactly with the estimates of visibility that were expected, in relation to this measured quantity called the extinction coefficient. It was also out of hand. It was not what you would expect it to be. The visibility is much lower than it is expected to be. Also, the sources I have say visibility is

expected to increase during the summer months, and here it was that the visibility was decreasing during the summer months. So, this was one of the first times where I had a known relationship between visibility and a quantity which can be measured, and fortunately which I was able to find at least one contemporary source for at a university.

The extinction coefficient by itself doesn't do much for us. But, as with a lot of my work, it is composed of a series of stepping stones, where one thing will lead to another and another, with enough thought and deliberation. The next part of this chain – and it's a very important one – comes when you have the extinction coefficient, which, remember, is directly related to visibility. You can consider those two things hand in hand. Once you have that, there is within it what is called the theory of light scattering. There's a whole theory of science called light scattering. It studies how light is attenuated, and what happens to light when it goes through particulate matter, in exactly the kind of setup we're talking about. It's a very involved, important branch of science. If you start studying that science you will see that there are relationships that have been established. Remember, these are all models, and all or much of science is based on models. There are relationships between this extinction coefficient and/or visibility and – this is what's important – the number of particles in the air and their size. And that is a very important link to make.

Jeff: Okay: the number of particles in the air and their size.

Clifford: The number of particles in a given volume of air and the size of the particles that are there. And that is a very crucial link to make because here's what you're saying. You're saying: I can only see so long. If I can only see such and such a distance, in theory I should be able to determine, to make an estimate, on the amount of material that's there, and how big it is in the sky.

Jeff: Got it. What's blocking my view. Okay. We're going to pause and listen to what they commonly call "news" for a couple minutes. We'll be right back with Clifford Carnicom to follow this latest update on the chemtrail controversy, as it affects each and every one of us listening in and participating tonight. We'll pause and take a few minutes off. While we away if you are on line do go to www.rense.com and take a look at the raft of new material up there. There are some very compelling stories, especially today- especially as the web gets thicker.

Break

Welcome back- we're talking chemtrails with THE man tonight, Clifford Carnicom. For all of you who have been looking up these past three years and at the very least experiencing that wave of emotion that runs over people – many emotions, not just one. There is anger, there is certainly anxiety, there is fear, there is rage, there is confusion, and there is a feeling of helplessness. There is a whole raft of things that people have described to me, and I have frankly felt myself, looking up. I remember the very day when the reality of this hit home. It really is a profound and life-changing issue. It's not a joke. We're talking about some of the hard and fast scientific data that Clifford Carnicom has assembled for all of us tonight.

Clifford, if you might, for listeners who have joined us, go back and read that vile EPA response very quickly.

Clifford: Sure, I do have it. And this is just one sentence which I consider a key and critical sentence out of their response. The sentence is this, coming from the U.S. EPA: "We would like to take this opportunity to inform you that it is not the policy of this office of the EPA to test or otherwise analyze any unsolicited samples of material or matter. Accordingly, we are returning the sample to you under separate cover."

Jeff: I guess that means if somebody came across what they thought was anthrax, or had good reason to think it was anthrax, you'd send it to the EPA and after a year and a half they'd just send it back.

Clifford: That's right. There is no logic in what has happened whatsoever and there is no public service, as is required.

Jeff: Nope. Okay, go right ahead, my friend.

Clifford: Thank you, Jeff. I see in my typical lagging fashion I am through page one of eight on my notes. So I will obviously have to adjust a little bit as we go. We're talking about analytical work, with the objective being to make an estimate of how much material was in the sky.

Jeff: And why we can't see as far as we ought to be able to.

Clifford: Yes. How much and how big it is. In summary, there are established relationships between visibility and the amount of particulate matter in the sky. Of course, it's a little bit more complicated than that, but this is the basic relationship. There are by necessity certain estimates that will be required in order to solve that problem, and that's what my work is about. On that particular page I think it's called: Air Quality Data Requires Public Scrutiny. I won't

go through the details of the math here, but let me say that what I did, what I attempted to do, was to take what I would call a very conservative approach. In other words, attempting to err on the safe side and be very conservative in my estimates. I'm doing that deliberately because I truthfully don't want to try and skew the results to give some ridiculous, absurd number. I want a conservative estimate of what is in the sky, and to see if it would make sense.

Now here's where some numbers come in, but I'll say it in text or literary form and then I'll give the numbers. In literary form, what I found that was my estimate of particulate matter in the atmosphere exceeds the limits established by the Environmental Protection Agency for atmospheric quality. That's what I found: that the estimates

exceeded the maximum values permitted by the EPA. Now remember, this is analytical work. I don't have the instruments. Every individual has to go through my reasoning and my process to see whether or not they think it makes sense or not.

Jeff: Got it.

Clifford: Just in terms of the numbers, in terms of comparisons, I did a particulate study a couple of years ago when this issue first started to come up. The number I ended up with at that point was 39 micrograms. Just for a point of reference, the EPA limit for what's called ten micron or less size is 50. Call it 50 as a reference number. Through

studying data from '96 to '98, I found the number being at 39. In 1999, the data I analyzed showed the number being at 46. And the estimate that I have arrived at through this very conservative approach, which I will keep re-emphasizing, is at 60. So, this is another stage of accomplishment, which is again subject to crossexamination by all parties of interest. Nevertheless, for the first time I have an estimate as to the physical amount of material. You're talking mass at this point: the actual physical amount of material in the sky. There are several factors that affect that process. The color of the haze is a very important one. And you will notice as we talk there will always be cross-linking between these topics, more and more as we go along. I'd like to suggest one thing tonight, if I'm able to get through this material. It is that it appears to me there is a unifying theme beginning to develop between the different disciplines I have been involved in studying. And this will lead strongly into the electromagnetic consideration.

But at this point you're saying: Okay, you've got metals there and you have an estimate of how much of it there is. That's an important step in the process. I'm sure that a couple of months elapsed, because a lot of times I'll do my work, I'll think; and it sits for a while, and then it associates with something else later on. Many, many months ago I had encountered a term within scientific studies that caught my interest because it appeared to be relevant. And that was one of a plasma. I suspect we mentioned the subject at one point in our earlier interviews. What happens is: one begins a study of a plasma, and it becomes less and less esoteric the more one studies it.

Plasma is an ionized gas. It's electrically neutral over a large area, but not electrically neutral on a local scale. It is a gas which is ionized, which has charged particles in it. It's not esoteric. Actually, something like 99% + of the universe is in a plasma state. The Earth is an anomaly, in a universal sense, in that most of the universe is ionized gas. The Earth is denser and doesn't qualify. But plasma is a very real thing. You can think of it as an electrically

conductive gas. The simplest visual, physical example I can give people would be that of a neon light tube, a fluorescent light tube. This is a gas that has electric currents sent through it, which causes a physical and chemical reaction producing light. So, it is a very physical thing. It's not just a Star Trek term. The more and more I study, the more and more I have come to accept it and finally start to get used to it. This state of matter, considered the fourth state of matter, is actually dominant. It's just that we haven't been particularly schooled or trained in it, in our solid, liquid, gas teaching.

So, this term surfaces again in my studies because the situation seems to fit. In other words, I have metals in the sky, and those metals have been seen by certain lighting techniques also. You can see that it's there. The material also had very interesting behavior, which we mentioned earlier. It appeared to be ionized. It was very erratic behavior. It was not linear in its motion at all. It appeared to be electrically charged. And so the term comes up again. The study comes up again. And what's different now is that when you have an estimate of how much material is in the sky, you then begin to analyze that from a plasma point of view. If you assume that there is a gas, if you assume that there are particulates in that gas, and if you assume that those particulates are of an electrically conductive nature, which is the state of affairs, you now have the essence, the foundation, of a plasma.

Jeff: We have turned the atmosphere into – however diluted it might be – certainly a rudimentary form of plasma.

Clifford: It appears to me that I cannot avoid that conclusion, no matter where I go. Again, I did not drive towards it...

Jeff: You didn't go looking for it. I understand.

Clifford: The same thing happened with HAARP, as we talked about HAARP, and these things you're going to see that start cross-linking no matter where we go. They all start to begin to tie together.

Jeff: We can follow these all the way back to Bernard Eastlund's patents, can't we?

Clifford: Exactly. And the connections become stronger and stronger the more I go into this.

Jeff: Okay. Now all of you, if this sounds a little complicated, it's not. Stay right with us. We're going to pause and come back. Just imagine that the atmosphere is slowly being reworked into a weak, but certainly usable and viable, plasma. And why would somebody want to do that? We have potential answers coming up and much more, with

Clifford Carnicom after this.

Break

Jeff: www.carnicom.com is the place to start when you want to try and figure out what those big white things are up in the sky above your head. Of course, now that winter is here storm systems are moving through. However, there are reports of heavy spraying in advance of systems; there are reports of people getting a break in the clouds and looking up and they are still there. I do remember in the area I am located that spraying stopped. I wrote the date down. It was July 16-17. They stopped and they didn't spray a single day for nearly three and a half weeks, and then it started up again. And all during this time, of course, the weather never changed. Nothing changed up there.

All right, Clifford, go ahead. We're talking about some fascinating things, for you latecomers. Clifford has been able to ascertain there is metal in the sky. There are elements up there. Metals, tiny pieces of metals, down to 2 microns, which apparently are behaving in a fashion that would indicate they have been in some way electrified, if you will. And we're talking about a rudimentary plasma that our atmosphere is now appearing to represent. Go ahead, Clifford.

Clifford: Thank you, Jeff. One of my strong suggestions for the evening is that each of us begins to educate ourselves on what a plasma is: on that state of matter. How you characterize it is what I'll try to talk about tonight. And then also: how is it used? What are its applications and what is it good for?

Jeff: All right. Now this is the kicker, folks. Don't lose this. What is it used for? And why would somebody want to do that?

Clifford: Right. And I would only encourage people not to be intimidated by the subject. I dig out the physics books myself. It's important to get to the core, to get an understanding of things. And the math is simply a tool to try and help quantify things.

Jeff: Of course, when we get to the punch line, we must not for a moment leave anybody behind who has been made ill by this. That's not what we're about here. People are being sickened, probably by the millions, for the last three years. And I suggest that there have been more than a few who have died due to complications of upper respiratory

and other issues that have been spawned by these metals that are in the atmosphere now. But again, it's a layperson's endeavor. We will get no support from our alleged government. So, all right, carry on.

Clifford: Thank you. And, again, I will also keep drawing the audience's attention to making these connections, which I know they're very good at making for themselves. There are a lot of people doing a lot of good research. That's hopefully what I can partly accomplish: to set some potential directions to dig into, for people who do have the appropriate knowledge and skills. You can spend a lifetime studying Maxwell's equations alone, which are the foundation of electromagnetics. I don't profess to have devoted my entire life to this subject by any means, but the need is there at the professional level to dig into this stuff. Just to continue to make this subject of plasma real: down at the store the other day, I saw that there are now plasma television sets. This is a very real thing that will be increasingly around us, probably in terms of our being more exposed (to its presence) as we learn more about it.

Jeff: Plasma physics. And where there is money to be made, friends, capitalism rushes to fill the void. Plasma physics is coming home to our homes. You watch and wait and see.

Clifford: Exactly. And I suspect that we will learn that we are surrounded by it. Okay, so you have the thing called a plasma. Then the next part is, well- how do you determine what it is? How do you figure out what it is? And what is it? Maybe I didn't really explain what it is properly. We know what a plasma is. There is this entity that is called the plasma frequency. Now the best characterization that I have of the plasma frequency is it can be considered the natural resonance of the plasma. You know, everything in the world resonates at a frequency. Whether it's the opera singer with the glass, whether it's a mycoplasma, or whether it's the Earth with its Schumann resonance. Everything resonates, and a plasma has a resonant frequency.

Jeff: It varies? Or is it pretty much stable?

Clifford: I think in the end it's probably a very complicated variable quantity, because things are always changing in a plasma state. There's no doubt about it- plasma physics is advanced physics. I can only begin to get my conceptual understanding, and then dig into it to the level I can. But you have whole agencies that do nothing but study plasma

physics. You don't do that unless you have a very complex entity that you're dealing with.

Jeff: Right.

Clifford: Now I wouldn't say it's constant, but part of my work here – and part of my work in general – is to come up with estimates that are reasonable and make sense but give you a starting point.

Jeff: Okay. Even that starting point, once in hand, certainly has to be put on the table with manipulation, with malleability. Can plasma vibrational frequencies be changed, and controlled? And the answer is, probably: yes. But we'll see what happens. Go right ahead.

Clifford: Yes, I would say the answer to that will be undoubtedly yes, that there is a great deal of manipulation. In fact that is a whole science in itself. But in terms of what I'm after, coming up with this estimate — this thing called a plasma frequency – how do I go about getting a handle on the thing? And how do I relate it to my world around me? If you start studying a plasma frequency and you dig into the math of it, you'll find varying equations and such. And in the end, what are you led to? You are led to the fact that the plasma frequency is a direct function of the amount, the number, of electrons in that gas.

Jeff: Okay. All right, let's hold it right there. The plasma frequency is a direct function of the number, the amount, the density, and the concentration of electrons in that gas – i.e., our atmosphere. Okay, hold that thought and we'll continue in just a minute.

Break

End Part I

Jeff Rense Interview with Clifford Carnicom

Part II: Chemtrails and Electromagnetism

Part II:

Jeff: We are talking with Clifford Carnicom about what's up there; heck- what's in our lungs- let's be realistic about this. Go ahead Clifford.

Clifford: Thank you very much Jeff. And I wanted to thank you again for the assistance you always provide, in helping to make these concepts understandable in ways I may not be able to. I appreciate that a lot. If you have any questions, or you think I am missing something- you caught me several times on things that can be explained further. So don't hesitate if that comes up- I'll do the best job I can.

Jeff: Sure. No problem at all.

Clifford: We had established that this entity called the plasma frequency, which can be considered a natural resonance of this electrically charged ionized gaseous state, is directly related to the number of free electrons within that gas. Now I don't want to lose folks, because what I'm after tonight is making connections. And when I say "free electrons", now I threw a new term in there. But the connection that I am going to suggest to you exists. Because it

does, there's going to be a connection between the number of free electrons and that amount of particulate matter that we said we know is up there. So that's a real important connection that's going to take place here.

Jeff: All right.

Clifford: If you know how much material is within that gas, you can make a reasonable estimate of the number of free electrons that are in that same gas.

Jeff: All right.

Clifford: And that comes from several sources. I'll recommend this fellow named Feynman, who I suppose a lot of people have heard about. The guy is great. His physics books came out in the sixties and I guess he worked on nuclear power projects quite a bit. The guy writes as clear as can be- he's very helpful.

From more than one source it appears to be a rather customary assumption to make that every atom of a metallic material has one free electron available. This is what he as well as other sources has stated. So you can start to make a direct connection and estimate of the number of free electrons that exist in relation to the amount of metallic material that is there.

Jeff: All right.

Clifford: So now that's another step, and an important one. Because now, if you have that estimate, you should be able to come up with an estimate for the plasma frequency of the altered atmospheric state that we find ourselves in. In addition, if you are correct in your analysis, and you understand what's going on, you also ought to be able to arrive at the plasma frequency for the ionosphere. Because we know some things about the atmosphere; it's been studied in great detail. That's a part of what I do; that's how I cross check my work. I started out by looking at the ionosphere to find out how many free electrons are up there. What is this plasma frequency? All I can say is that I have arrived at all these numbers- I've done the work. I end up with a value that agrees quite nicely with what all the sources are saying is a reasonable estimate of the plasma frequency for the ionosphere. And that value- just out of curiosity, the one I came up with- is about 3 megahertz, which is in the radio wave band. Actually, as you can see, it fits quite nicely into the whole discovery that radio waves reflect off of the ionosphere.

Jeff...Yep, up and down: they bounce around the globe.

Clifford: That's an important characteristic of it. So the numbers made sense when I started to look at the ionosphere. I'd like to read this short statement by Feynman to further clarify what is important about a plasma, and especially this plasma frequency. This I think is a very helpful statement. Feynman says: "This natural resonance of a plasma has some interesting effects. For example, if one tries to propagate a radio wave through the ionosphere, one finds that it can penetrate only if its frequency is higher than the plasma frequency. Otherwise the signal is reflected back. We must use high frequencies if we wish to communicate with a satellite in space. On the other hand, if we wish to communicate with a radio station beyond the horizon, we must use frequencies lower than the plasma frequency so that the signal will be reflected back to earth."

This is obviously a very important interpretation and application of the plasma frequency. Because it's saying: once you know what the plasma frequency is, you can then characterize how electromagnetic energy is going to behave when it is sent through that medium.

He is saying is that he had a critical threshold, and that if you are putting more energy into it than that threshold, then you punch right through it. And in terms of the ionosphere, it just goes right on through into space. But if it is at that point, or less than that point, then it has the behavior of either being reflected or propagated, or conducted through that medium.

Jeff: OK- propagated, or conducted through the medium. Now this is the ionosphere we are talking about. And many of you are saying "Aha." We have heard something about this before, when Jeff has had guests on talking about the HAARP Program. Which is intended to pump up mass amounts of energy into the ionosphere, and which propagates

and changes the ionosphere into a "tool", as it were. We will follow up with more as we continue. We are headed toward a break now. Clifford Carnicom has done some masterful work. I've had another email from George; we will read that, Clifford, when we come right back, in just a minute. I'm Jeff Rense, talking about very important things- things that would probably not surprise Nicola Tesla at all. But which would come as a surprise to Mr. And Mrs. America if they were to realize, or be confronted with the data, that would indicate that our atmosphere is being turned into a large "tool". For what? For the military, for defense, for mass control of one sort or another? Good guesses. We'll talk to Clifford more as we continue.

BREAK

Jeff: Another follow-up email here, as I mentioned, from George. Thank you again George. He says: "Hi Jeff. I am a certified plasma-cutting/welding equipment technician with the Thermodynamics Corporation, with many years experience with plasma-generation devices. Mr. Carnicom is quite right. Plasma is "the fourth state of matter", and has been harnessed by companies like Thermodynamics to cut and weld anything which is electrically conducted. Electrical conductivity is the key. One of the hallmarks of plasma equipment is its ability, considered a drawback, to generate extremely powerful EMR fields around the plasma stream. It is so powerful that at a distance of a thousand feet, a 70-amp plasma torch can completely block out tv and radio signals. It is one of the reasons that this equipment is not sold for home use. You would wipe out the tv reception in an entire neighborhood." And he goes on; there is more. Let me finish up. Are you there Clifford?

Clifford: I certainly am.

Jeff: OK. I heard another big squeak on the line. I wanted to be sure our connection was still up. He finishes up by saying: "The temperature and frequency of the plasma can be easily modulated by varying the gases used to generate the plasma. We have used argon, carbon dioxide, and even dry, dehydrated, normal air. And by convarying the amperage and voltage applied to the plasma stream." So you see the malleability here- it's extraordinary. "One guess" says George "I have as to why the atmosphere would be being primed for plasma applications is that it would be very simple to selectively prevent the use of specific frequencies for radio communication- EMR. Doing this would be relatively simple if you were able to pump enough energy into the atmosphere. Installations such as HAARP could theoretically provide this sort of energy requirement." That's from George.

Clifford: You're getting some great feedback tonight Jeff, and you can tell that there are some real thinking and knowledgeable people out there...

Jeff: Who appreciate what you are doing, I might add.

Clifford: Thank you, and my hope is that these knowledgeable people come to the forefront and act in the public welfare to expose and disclose those activities which have and are taking place without the participation of the American public. It's good to know that there are people that are taking the issue seriously, as it should be, and hopefully will be inspired to take action as well. So I really appreciate some of the feedback that you are getting.

Jeff: Well, it's underscoring what you are doing- perfectly.

Clifford: In continuation of this discussion, we tried to characterize what a plasma is, and how you arrive at it, and what its physical interpretation is in terms of resonance.

Jeff: We might also add, Clifford, if I may interject here, that the general thrust of where we are going is that this atmospheric manipulation has been a deployed project for the last 3 years now. This is the application to the atmosphere of apparently what may be very tiny, micron-sized pieces of charged metal and so forth. Or that would become charged with the proper application of enough energy pumped up into the ionosphere.

Clifford: That's right. Ionization was another study that had come forth some time ago and we also had talked about. The energy from the sun itself is sufficient to ionize certain metals, and those metals are the candidates we're speaking of. So, in the ultraviolet light portion of the spectrum, and even part of the visible spectrum, there is ionization of metals that can take place. So we may have a source of energy for a portion of operations even in the ambient atmosphere. What I have done is extend the same method- mathematics and reasoning- that I applied to the ionosphere studies, to an examination of the lower atmosphere in its, what I call- altered state.

This means that I have arrived at an estimate for the number of free electrons that are expected to exist within this modified lower atmosphere. I have attempted to the best of my ability to make an estimate of the corresponding plasma frequency for that state. Bear in mind in terms of connections there is a pretty strong one with this. Because this starts with visibility studies, then it leads to mass estimates, and then mass estimates lead to free electron estimates. Free electron estimates lead to plasma frequency estimates, and that's where I'm at right now.

My work in that regard again leads to a number, again subject to cross-examination. But I end up with a number that is at the upper end of radio waves; actually, radar is where I end up. Bear in mind that it's an estimate, the best I can do. But it's an important estimate. Because a part of this is that even though there may have been general

conceptions about electromagnetic energy, you want to know where to put your effort.

You don't want to be tracing down gamma rays and X rays, if that doesn't seem to be a primary target. And there's a huge difference. The electromagnetic spectrum is very important to become familiar with, as we study this. Because we want to know where to put our energy, no pun intended, to understand what is going on. So this is a threshold: plasma is a threshold frequency that is an important one to attempt to identify as best we can. What I am saying is that at this

point in my research I end up at- you could call it the upper limit of radar. You have radio waves, then you have radar, and then you have microwaves and then you have visible light. Then you go up into the high stuff- gamma rays and all this type of stuff.

Jeff: So it's sitting right at the top of radar.

Clifford: Yes, I am speaking of a limit at the upper end of radar. And consider leewaythis is hardly exact, what's going on here, so don't rule out microwave frequencies by any means. In fact there are some interesting observations I have made over time which suggest we might be in that borderline area. I'm just saying that this is a point where I end up, and it's an important threshold to identify. Because it now opens up the question of interpretation and application, in a more specific way than just to say generally- "Hey, they must be doing something about sending energy". This threshold is important in the sense of propagation and/or reflection, as we described earlier.

So the conclusion I would draw from this, if the analysis is correct- and I will always qualify myself- is this. If the analysis is correct, then the interpretation is that you now have a medium in the lower atmosphere (now close to the earth instead of 60 miles up in the sky) that is potentially beneficial to the propagation and to the conduction, the transmission, reflection- let's call it modification and control- of electromagnetic energy at the radar level and below.

And that's a real important part to stress here. Because even though you have a threshold value, that means everything below that and up to that point has many many possibilities for application.

Jeff: Many.

Clifford: So, don't think of it just as a plasma frequency, as though it either reflects or doesn't reflect. I will speak about modulation soon, and you enter a whole range of considerations of use and control of frequencies below that point. Say in the radio waves and such, up through and including radar and/or microwave.

Jeff: Keep in mind also that some of the frequencies in the radio wave spectrum have certainly been demonstrated already to have sometimes profound effects on living organisms. Keep in mind also another image here: the ionosphere, 60 miles high, has somehow, through the possible and apparent spraying of *something,* been either extended all the way down- or a second ionosphere, if you will, has been created at a much lower level, to deal with whatever issues the folks doing all this are intending to deal with. This is again a technology that has been around for probably a hundred years, conceptually, through the sheer, peerless genius of Nicola Tesla, and is being implemented now as we speak. We have about a minute to the break, Clifford.

Clifford: Yes, that's probably a good breaking point. You are very helpful at your conceptual interpretation and relays to people, in terms of what's happening. And I think you very well describe the general content in a large conceptual way of what it is I am trying to relay. I think you have hit it exactly right on the head at this point so far.

Jeff: Good. All right. And again, on Clifford's website at www.carnicom.com you can read for yourself, at your leisure, the works of Bernard Eastlund as they may apply to this. We are going during our next hour to look into some very dark and potentially dangerous corners for the future of all of us, in terms of mass mind control, mass health control, and owning the weather- which is the avowed goal of the Air Force by the year 2025 or sooner. And certainly environmental and climatological manipulations which many feel are going on now, and have been going on for several years at least. When you turn the atmosphere of this planet into your blackboard, into your tool, into your mechanism- and have at your disposal literally hundreds, maybe thousands, of potential applications- it is a little disconcerting to think of who, just who might have that kind of control over our atmosphere. OK we'll pause, and ruminate and cogitate, and come right back to continue our discussion with Clifford Carnicom.

Break

Jeff: Welcome back- hour 3 coming up with Clifford Carnicom. I'm Jeff Rense, and we're glad you are here. We are riding the wave generated by the magnificent research of Clifford. We're getting to the point, I think, of coming up with a real disturbing scenario as to where at least part of this chemtrail phenomenon may have been leading us all,

or forcing us all to go. Clifford, I am going to stand aside. We have got one hour to make a lot happen here in a short period of time. So go ahead.

Clifford: Thank you Jeff. I'll just fit things in as best as I can here. What I would like to do is jump ahead in my outline a little bit, and just give one example of an application I ran into which now makes sense to me. I have to say that up until a few weeks ago or so I didn't really feel as though I had any sense as to how frequencies are used. You know, my knowledge of electromagnetics is limited in extent. I do the best I can. I'm a ham radio operator, but there is still plenty I can learn. I remember saying: "How do you use these frequencies? How do you know what's being used? And how do you use it?"

After I had done this work at the state we have discussed thus far, I ran into a paper which I had seen, and registered, probably five or six months ago. But at this point it now takes on a whole different meaning to me, in terms of an excellent demonstration and example of applying the technologies and medium we're speaking of. Here's the title of the paper- it's technical, but we'll sort of punch through it: "Simulations of ELF Generation Generated by Heating the High Latitude D Region" The translation is: playing around with the ionosphere and generating ELF, extremely low frequency, radiation. Now, a couple of things of interest: guess who the paper is put out by, to begin with. It's put out by the Naval Research Laboratory in Washington, DC- the Plasma Physics Division. The Beam Physics Branch are the folks who put out the paper.

Jeff: What year was that?

Clifford: It's fairly recent- 1999. It's just an abstract. And I'll give you the punch line of what I have been able to understand is going on here. It's really pretty amazing. I mean it fits right in. Now this is a simulation, but simulations are based for purposes of reality at some point. Here's what they're doing. Remember we talked a little bit about the spectrum, and that the radio is below this threshold frequency that I'm coming up with. They're saying that if you take a radio frequency energy- they call it a few megahertz- and send it into the ionosphere, it causes the ionosphere to heat up. When it heats up, the conductivity of the ionosphere changes. Conductivity is a term I'll talk more about soon. The conductivity of the ionosphere changes, and there is a direct result. As the conductivity varies according to this heating, a current is generated in the ELF portion of the band. Now, what's important about ELF? It's something that you just mentioned. One important point about ELF- extremely low frequencies- is that you are talking about 5 cycles, 10 cycles, up to a thousand I think they call it.

Jeff: That's hertz.

Clifford: These frequencies are established, are known to directly affect biological systems.

Jeff: Yep. 5 hertz, 10 hertz, 5 thousand hertz... Royal Raymond Rife found that the harmonics in Hertzian frequencies in some cases can destroy harmful bacteria and viruses. We do know, and I might raise this very quickly, about Kasnachev's experiments in Russia. Some years ago he demonstrated very clearly that the transmission of disease, and certainly the diseased condition itself, can be manifested

by some kind of energy. He supposed it was some kind of electromagnetic energy, and a fascinating experiment was done in a laboratory with two pieces of tissue. Starting with one piece, he separated the tissue into two and put them on either sides of a crystal glass. He infected one piece of tissue with a mortal dose of a bacteria, and watched the other piece- the sister half on the other side of the crystal- become ill with the same physical characteristics but with none of the bacteria present.

Clifford: This is an open door for us to be investigating now- the biological implication of what's going on. When you read the papers from these folks they have their statements out there: "Hey, this is weak as can be, won't cause a problem, at all, not even close."

Jeff: (hah)

Clifford: But I'm just not seeing these papers as being the whole story. Number 1, they're not talking about the consideration of using a modified atmosphere. They're not talking about a medium which is much more conductive than it should be.

Jeff: *Much* more conductive than it should be.

Clifford: The representations of doing no harm- I don't know that they're done in a fair presentation.

Jeff: Well, since when do we trust "them" anyhow? Go ahead.

Clifford: Something that's real important here to me is that it is radio frequencies that are being used to control a current at another point. So the topic here is one of modulation. Modulation is a term we also need to learn about, because this is basically one frequency using or controlling another frequency. And so that's why this notion of

dealing with just radar waves or so doesn't hold. That's not what it's about. You now consider the range of frequencies available to you. You need that special frequency, for basically modification and playing around in all kinds of numerous ways.

Jeff: Yep.

Clifford: Using one frequency to control another, to generate another. And so if you're using a radio frequency wave, as your main carrier or whatever, in the end you may be dealing with ELF waves- which were truly the final objective. Remember ELF waves: their claimed objective is one of communications and such. Also ground probing radar and this type of thing are the official applications of that.

Jeff: The "official applications". That's what they are talking about now: how HAARP may be used to find Osama bin Laden, hiding in one of his caves.

Clifford: Absolutely- that's a part of this. That's a part of this technology. If you can generate ELF – what I am saying is we have a medium surrounding us that appears to me to be sufficient and conducive to that transmission and creation of energy. So that's an application I wanted to mention to open up the door. There are some things we need to be studying real quickly, to learn what is potentially being done to us and to raise the alarm- as is appropriate.

Jeff: Just don't send your complaints to the EPA.

Clifford: Apparently they're not the most favorable agency to actually accomplish anything.

Jeff: Unless they ask you for input- save your time.

Clifford: Right. Do we have time to carry on into the next subject then?

Jeff: We certainly do. We've got about 45 minutes of the hour left and about 80% of that is talk time.

Clifford: OK, thanks Jeff. What I think will start to emerge as the night goes on, beyond these connections, is that we are going to see a merging taking place between things I am measuring, and those things I am arriving at primarily through analysis. And that's really how this whole topic of discussion came about tonight. I just felt as though we've got to get some information out so people can start to dig into it for themselves.

The next topic concerns one of measurement of current. Although each of these exists as a separate topic, side by side, they all establish a connection I simply cannot avoid, the more I understand. What happened was, about 4 months ago, in July or so, I said: OK, we've got this metal in the air. It would seem reasonable to me that I'm postulating there's a current flowing in the air that shouldn't be there. If that's true, how do I go about measuring that current? Is it possible to measure current in the atmosphere? That was a very interesting problem for me. I kept finding myself going into numerous disciplines, which I knew a little bit about, and then had to dig into and study. Basically I became involved in electrical engineering for about 2 months, concentrating on a particular circuit I designed and modified from a base circuit that I found. The instrument of discussion here is called an electrometer. Measuring atmospheric current is possible. It's not real easy. You can't just go down and buy something- let's say inexpensively. You can if you have a thousand bucks or so, to buy meters, but I don't have that. So to measure atmospheric current through layman resources is a difficult problem, for me at least.

Jeff: All right. It's a great goal; it's an amazing task. We'll find out more from Clifford about that in just a minute. Don't forget his website, www.carnicom.com, the data center for the chemtrail phenomenon. And you can read again about Eastlund's patents- we'll see if we have time for that. The illness issue is of grave significance and importance- we'll touch on that as well, after this.

BREAK

Jeff: All right. We're right back with Clifford Carnicom. Plumbing the depths, or the heights, of the chemtrail mystery. Go ahead Clifford.

Clifford: What I did was, I combined the mathematics and studies and some electrical engineering to construct and design what is called an electrometer- a very sensitive electrometer, I might add. An electrometer is a device that is useful for measuring static electricity. It sort of looks like magic until you get the science behind it. It's actually quite fascinating to watch this thing as it is employed. To give you an idea of the sensitivity of this thing, if you were to take a plastic comb and comb your hair, this meter will deflect quite visibly and noticeably- from a distance of five or six feet away is not an exaggeration at all. So if you move a plastic comb five or six feet away from this meter, you're going to see this meter register very easily. That's a fascinating thing to watch, and this meter will distinguish between positive or negative charge.

Just so people understand the general layout, the earth is negatively charged. This is all expected and known. And the atmosphere is generally positive in nature; in fact most of our environment seems to be positive. I think we have an incredible skew that's taking place though, because the air is positively charged, but it's not supposed to be that much. The ratio is 250 to 200, apparently, from what I can gather. So I constructed this device, and I have to say it was a lot of fun. It is just an amazing thing to see this, and to investigate your world in terms of electrical charge: positive, negative, and what's going on around us.

I had the disadvantage of not having enough money to buy a calibrated meter, so I had to somehow try to come up with qualitative data again to attach to this meter. Through quite a bit of work I came up with an algorithm, a method that probably involved about ten steps, primarily using mathematics and the definition of current and charge and this

type of thing. I came up with a method of quantitatively assigning measured electrical flow to this meter. This was quite complex for me, and I wanted some confirmation on it, because what I was doing was a little bit experimental and theoretical. So I actually had to outline my algorithm. I sent it to the Department of Energy for their response, because they have an active scientist aboard; they run Newton BBS- or whatever. I sent them an inquiry asking: "Is this method sound, what I'm doing? Does this all make sense? " And they wrote me back and they said: "This is beyond the scope of our service."

Jeff: (chuckle) They didn't say "knowledge"- they said "service," didn't they?

Clifford: Yes, so I wasn't able to get any help from them. I also put it up on some electrical engineering boards. Didn't really get any response at all. But curiously enough, about a week ago, I went back and found that one person had left a response, in detail. And he basically confirmed the soundness of the method. So to the best of my ability it does appear to be legitimate, in terms of what I am doing here. Now, atmospheric current does exist. It's known; it's a fundamental physical property of the atmosphere and the earth- the electrical current flowing. It's a very small number we're dealing with. The expected numbers are in the order of 1 to 2 microamps of current. This would be expected to be flowing through the air. Now a hairdryer or a microwave takes something like ten amps, or something like that. So you're talking about a millionth of 1 amp.

Jeff: Now you'd expect to find that naturally.

Clifford: Yes, yes. This is what should be there, from what I can gather. I actually see ranges from a portion of a microamp up to, say, 1 or 2 microamps.

Jeff: All right. This is what we would expect through Clifford's research to find in the atmosphere.

Clifford: So when I did this work, very systematically, I did it over and over and over. I just kept measuring and measuring and measuring, and applying the algorithm. And no matter what I did, it was pretty much consistent over many days, at different times, in good weather. Here's what I get. I end up at a number roughly 11 to 13 microamps. Now, again, my work is all open to examination and someone else, if they can help me and tell me I'm wrong, then I'll adjust my ways.

Jeff: So it's ten times what you would expect to find?

Clifford: Yes. This is what I find. What was amazing was how consistent it was, no matter how I did it. Because it involves a differential equation, where you are measuring current over time, using a basic definition. And even though the circumstances changed through the day, the end result was always the same. I would end up at a magnitude, which was dependent upon my analysis and understanding of the circuit I had designed, and that type of thing. All I can say is, this is what I end up with. What happened next was, I just let that thing sit, because I had no confirmation. I had no one to tell me: "Is this real or not?" So I just kept recording the values, and

doing the work. It exists as a study, and then I just let it sit. And it probably sat for 2 or 3 months before I start doing the other work that we're talking about, to do with plasma physics.

Jeff: Fascinating. Let's take that point right there and hold it. You see the parallel tracks here that are coalescing, and we'll get where they join in just a couple of minutes as we continue with Clifford Carnicom. I'm Jeff Rense, and we are getting the latest possible into what is apparently going on in many, if not most, places in the world- called "chemtrails".

Break

Jeff: OK. We're back with Clifford. Remember, all the work he has done over the years is being done out of the goodness of his heart, and out of his own pocketbook for all of us. That's the part we need to keep in mind, as we ponder all these amazing things he has come up with. You can tell from listening to the description of how it went about this work, he is essentially large self-taught. This is science standing up and shining as brightly as you're going to see it shine. Go ahead Clifford; we've got the parallel tracks- there are several of them- let's see where they come together.

Clifford: Thank you Jeff. And to keep things in perspective, one source I found on this electrocurrent in the atmosphere says that during a major storm- if you have a really heavy-duty storm going on- you can get up to 10 microamps.

Jeff: That's an electrical storm.

Clifford: Yes. There's a whole lot of activity going on, and things are really charged up there. So what's happening here, if my work is correct, what it's saying is: the results I was getting under fair weather, normal, mild conditions...

Jeff: Should be under extreme weather conditions.

Clifford: Yes. Exactly. There is another interesting thing that has developed. I told you I did this some time ago. It's been sitting for a couple of months. I just picked up the meter again a week or so ago, and started to look at it again. And what's happening right now is: the thing is playing off the scale. In other words, this meter was designed and developed to be very sensitive, within a certain range, and it is a really narrow range. It is really is an incredible thing to watch. But what's happening now is that it appears to me that the current flow may have increased to the point that where my meter is no longer usable. That the circuit needs to be...

Jeff: It's off the scale of your meter?

Clifford: Yes. It appears as though it needs to be redesigned to accommodate a greater magnitude of value. That's the way it appears to me. I really cannot get readings right now, because the time differential is just too short. It's dependent upon time measurements. So that's an interesting side note, after a lapse of a couple of months. We may also take note, as we said, that the aerosol activity has been especially heavy during those the last couple of months.

Now I am in the situation where my meter is going to need to be redesigned to pursue that study.

So you have a measurement taking place that indicates a certain value, which is, let's say, of great interest. Parallel to that, you have analytical studies taking place, which are attempting to examine the fundamental characteristics of the atmosphere as characterized in a plasma state. We have discussed the plasma frequency being one of those

fundamental defining characteristics of that state. In addition to that plasma frequency, there is another entity, which is equally fundamental in characterizing the behavior of that plasma. And that is the conductivity. This is another whole line of research and analysis I have engaged in: that is, to attempt to assess the conductivity of this altered atmosphere- in addition to using the ionosphere as a reference point.

Actually what I'm doing is looking at the conditions of the ionosphere- the normal atmosphere, as it has always been portrayed, and of which certain values are available that have characterized that. Then this altered state of affairs I am finding is basically sort of in between these two. I'm arriving at results for defining both a plasma frequency and what's called conductivity- conductivity is like the opposite of resistance- for this altered state. Here's what happens, and this is partly what certainly prompted me to make contact with you again. What occurred was, I ended up with a value for the expected current flow, by analysis alone, which traced all the way back through, to that

original discussion we had tonight: from visibility. Remember that whole lineage that takes place: visibility, number of particles, number of free electrons, plasma frequency, and conductivity- current density is what conductivity is called. From that whole lineage, I arrived at a number, in terms of what I see and study around me. That number is

matching exactly with what I was measuring.

Jeff: How shocked were you about that?

Clifford: It was- well, I think you can imagine.

Jeff: Yeah, that's almost overwhelming, to contemplate that.

Clifford: I'm not claiming to be right on everything I am doing. I am claiming to be doing the best I can.

Jeff: It sure brought you into the right room though.

Clifford: Right- to solve the problems that are facing us. And I do like to look at things in more than one way. I do like different angles, and what I am saying is- I am being led to this place of identification and consideration of the electrical properties of the atmosphere being altered in a way which is fundamentally significant. I mean as a property of the earth, of our world: the analysis of data shows to me that it has been fundamentally altered. This can

lead to no other consideration than that the propagation of that current is potentially the primary subject and target

matter of the affair to begin with.

Jeff: Wow. Wonder if Mr. Eastlund is listening.

I know a lot of people are, who are very concerned about your headway. Not that they're too concerned about the cat really getting out of the bag. Because most people are pretty well diverted in day-to-day living. Fascinating. An incredible odyssey. We'll come right back and get a final wrap up in our last segment with Clifford as to where he

thinks this may be directly leading. And remember, it's all being paid for by us.

Jeff: OK. We're right back with our last segment with Clifford already tonight. It went fast. Here's another note, Clifford, from George. And he says: "What Mr. Carnicom is describing is known as carrier frequency. Carrier waves in the ELF and long wave spectrum have been used, for instance, in CB radio to communicate around the world using skip technologies, whereby a wave is bounced off the ionosphere and recaptured at stations many thousands of miles away. The carrier wave is "excited"selectively energized. A particular carrier wave is "excited"- selectively energized, to carry a message when necessary. And otherwise it becomes a standing wave, undetectable, until it is energized again. It would be very simple to measure the current in the atmosphere of a carrier wave, using a signal strength meter tuned right directly to the frequency of that particular wave. You need to know the exact frequency and wave length of the carrier wave- otherwise you will need to sample with oscilloscopes until you get a variance in the background. The interesting thing about the whole carrier wave technology is that it needs to be at extremely low power. Otherwise it leaves the atmosphere- goes right through the ionospheric level and heads out into space. With as little as 0.1 watt of power, at wavelengths of 9 meters or longer, you can excite a wave and make it circum-globally receptible, thereby allowing the dispersal of potentially damaging radio frequencies."

Clifford: I think that George is undoubtedly a helpful source and resource for this problem.

Jeff: No doubt.

Clifford: I hope we can make contact. The basic proposition, which is being put forth here, is fairly simple. That is: it is proposed that the atmosphere has been turned into a conductor. That's the argument, which needs either to be proven or disproved. We have to make our priorities, in terms of what is covered in the last few minutes. But as another aside, to do with this business of measurements, I'll also say I have another set of measurements which is important to me. They cause more than a mild level of curiosity in me, and also extend back to measurements which I have just sat idle on. Again, there is no confirmation. I don't have the tools or resources to substantiate it. But it is one of radio frequency measurement. I do have a frequency counter that I was able to acquire. This frequency counter does measure radio waves- actually a broad range of radio waves.

I will say that I am almost continuously and repeatedly monitoring, and finding what appears to be a continuously varying RF signal in the magnitude range of roughly 3, 3 and a half, to 7 megahertz, primarily centered on about 4 megahertz. It is of more than passing interest that these frequencies I appear to be picking up on a sustained basis do correspond exactly to the preferred range of HAARP transmissions. These measurements, again, need either proving or refuting, from other sources and other locations. I did have the meter transported to Colorado, and the measurements were occurring along that trip. I have no meter to compare it to. Am I giving completely erroneous

information? I would like to know, but I know that I am seeing a convergence and confluence of both measurements as well as analytical work that strongly supports the proposition that the atmosphere is indeed in a conductive state.

Jeff: That it has been put into a conductive state.

Clifford: In the end we want the truth- that's what it is all about. I want to say I have been questioning and asking about the other scenarios that are being mentioned. You know, one of the Grand Theories out there is about a global shield for global warming. I started to look at the paper that circulated prominently for that argument. I saw the paper probably several months ago. But I'll tell you, when I read it last week, there was a word that really stuck in my mind as I read that paper. If you remember what that's about, it's about Teller and his proposition that by putting aerosols into the air we can reduce global warming. If you look at the report, what I see is a key word showing up that I have been completely oblivious to before. And the word is "dielectric". The primary thesis of this paper appears to refer to the introduction of dielectric aerosols. Here's what is important: a dielectric is an insulator. A dielectric does not conduct: that is the definition of a dielectric. The aerosols that we are speaking of, that are being identified repeatedly, over and over, are metals. They are conductors. It doesn't fit.

Jeff: Not with what Teller said- no.

Clifford: It doesn't fit. And I found in that same paper that they considered the introduction of aluminum aerosols, and they say that this would be very damaging and would have serious environmental consequences.

Jeff: Ah. Environmental, as in health, potentially.

Clifford: I seriously have to question the viability of that thesis, based upon the data that are available. In addition to that, there are size issues that come up with that. My best analysis indicates a size range anywhere from a half-micron to a couple of microns for primary sizes involved. It has to do with light properties: the light-scattering theories we were talking about- this type of thing. When you start dealing with aerosols that are 10 microns or a tenth of a micron, what I'm finding in these reports about that hypothesis, is about stopping global warming. They don't fit either. So I have two fundamental contradictions showing up right now that I cannot accommodate into the analysis.

Jeff: Doesn't sound like global warming is the answer folks.

Clifford: In addition, if you look at this question of ozone protection- here's a statement. Listen to this statement from another paper: "Aircraft emissions of nitrogen oxides and water vapor add to the accretion effect by creating ice crystals that serve as a base for ozone-destroying reactions." So it also appears contradictory to me that there would be a supposition of aircraft operations to remediate ozone damage.

Jeff: Got it. You don't remediate it- you exacerbate it. I understand.

Clifford: I know we only have a few minutes left. But I guess what I would like to say is that I'm looking for a proposition consistent with all the data and all of the theories. If you consider such suggestions as have been reasonably made, such as weather modification, transfer of particulate matter by design, the illness, health and increasing mortality data that is readily available: the question arises as to why you would use a metal as your aerosol base. Then there are the degraded visibility conditions, which are easily documented. Another side issue, which we didn't have time to talk about, is the whole radar anomaly phenomenon. The visitors who have taken an interest in this information since the research first began are of a strongly military nature. If you are looking for a thesis that appears to be consistent with all of these agendas that have been postulated, the one that appears to me

to be the most consistent, the most comprehensive, does by necessity involve the postulate that the air has basically been altered to be a conductor.

Jeff: That means, friends, that our atmosphere has been taken over and turned into a tool by somebody- some group, some faction, some power base- to do potentially many many things. Not all of which are salutary to our physical, mental and environmental well being.

Clifford: "Many many things" is really a key phrase. Because just think in general terms: if I can send energy from point A to point B, that means I can do things. And I can do lots of things.

Jeff: And if I can send energy from point A to world wide- I own the world.

Clifford: So one cannot deny the military implications in the data that has emerged, and the consistency with all of the studies and reports that have been done by numerous citizens beyond myself over a three-year period. Consider the technology of HAARP, which was introduced into my work a year and a half or two years ago. Think of the

technology as not occurring up in Alaska but occurring anywhere that the medium is suitable for the transmission. Then I think you have a more accurate portrayal of how the energy is likely to be used. There's no restriction to Alaska on this.

Jeff: Of course not. And a HAARP array can be trucked around; I understand that three or four tractor-trailer rigs can be set up anywhere.

Clifford: There is an array about 40 miles down the road from here. It's quite amazinglike a little mini-HAARP. And who is to say it has to be ground based? The technology allows for propagating this energy in any form you wish, on a local or regional scale.

Jeff: For almost a limitless number of results. It's mind-boggling. Ultimately it is anxiety-producing, when you consider that the people who are in control of this technology, this potential control of the planet- which I think is ultimately where it would lead- are not necessarily benevolent folks like most of us are.

Clifford, would you agree?

Clifford: I would entirely, Jeff.

Jeff: All right, my friend. Thank you. Magnificent work. I salute you- I thank you on behalf of countless Americans for your work. We will talk again soon. Take care.

Clifford: Thank you Jeff. Have a good night.

End