

Carnicom Institute Research

2001 - Part 1

Acknowledgements

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Jan
PARTICULATE PHOTOGRAPHS

Jan 4, 2001

**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.



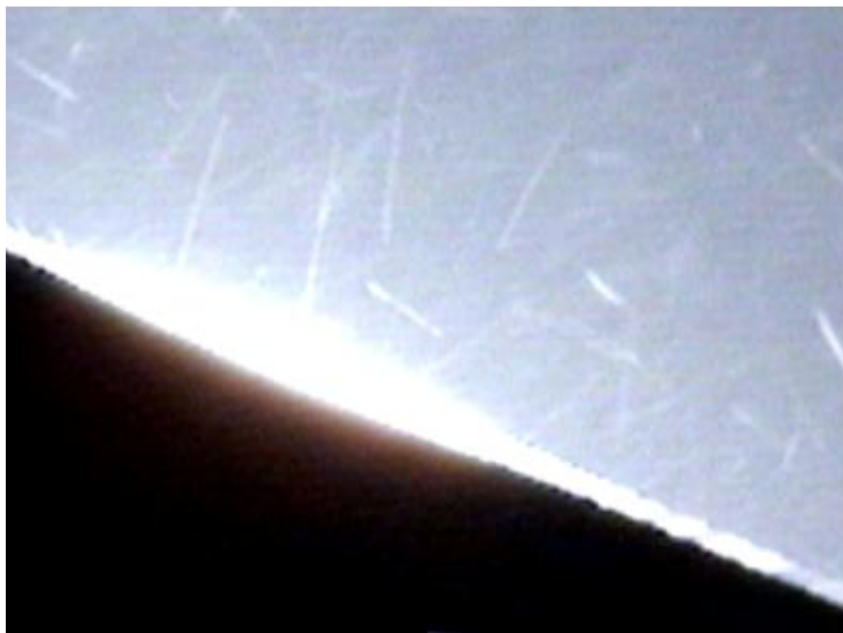
Video still which shows the “clear” blue sky of Santa Fe at the time of the video shoot. Jan 01 2001, two days prior, was a day of intensive aerosol activities over the Santa Fe and Albuquerque area. No wind or visible dust in the atmosphere on this day.



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"

Jan 9, 2001

**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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 21 2000

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Dear Mr. Carnicom:

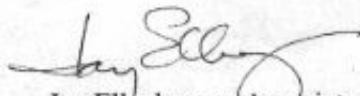
This letter responds to the many identical letters dated October 31, 2000, and addressed to Carol M. Browner, Administrator of the Environmental Protection Agency, and others regarding the issue of "aerial sprayings occurring over the United States." As you know, these letters were generated from your 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

Jan 9, 2001

EASTLUND BARIUM REFERENCE

from

<http://www.visitations.com/mindnet/MN151.HTM>

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MindNet Journal – Vol. 1, No. 51
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V E R I C O M M / 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-occurring 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 seq.

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 (2.5×10^9 K) 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 1.7×10^{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 B_m, 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:

$$\sin^2 \alpha_0 = B_0 / B_m$$

wherein:

α_0 = equatorial pitch angle of particle

B₀ = equatorial field strength on a particular field line

B_m = 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 (N_e) 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 of 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 10^9 to 10^{11} 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 $d=1$ 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. 1). 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 10⁶ 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., 10⁸ joules need be provided. Likewise, if the density Ne is on the order of 10⁸, 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

Jan 9, 2001

PLOT OF RAINFALL pH TEST DATA

THIS PLOT REQUIRES A JAVA ENABLED BROWSER (v1.1.5+)

[Click Here for Java Applet](#)

[pH Test Alert](#)

[pH Test Results](#)

[20 Times](#)

[Drastic pH Changes](#)

]]>

ABSORPTION STUDY

Jan 9, 2001

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 attenuation 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

Feb

USAF TO TAYLOR: ALL IS 'ORDINARY'

Feb

USAF TO TAYLOR: ALL IS 'ORDINARY'

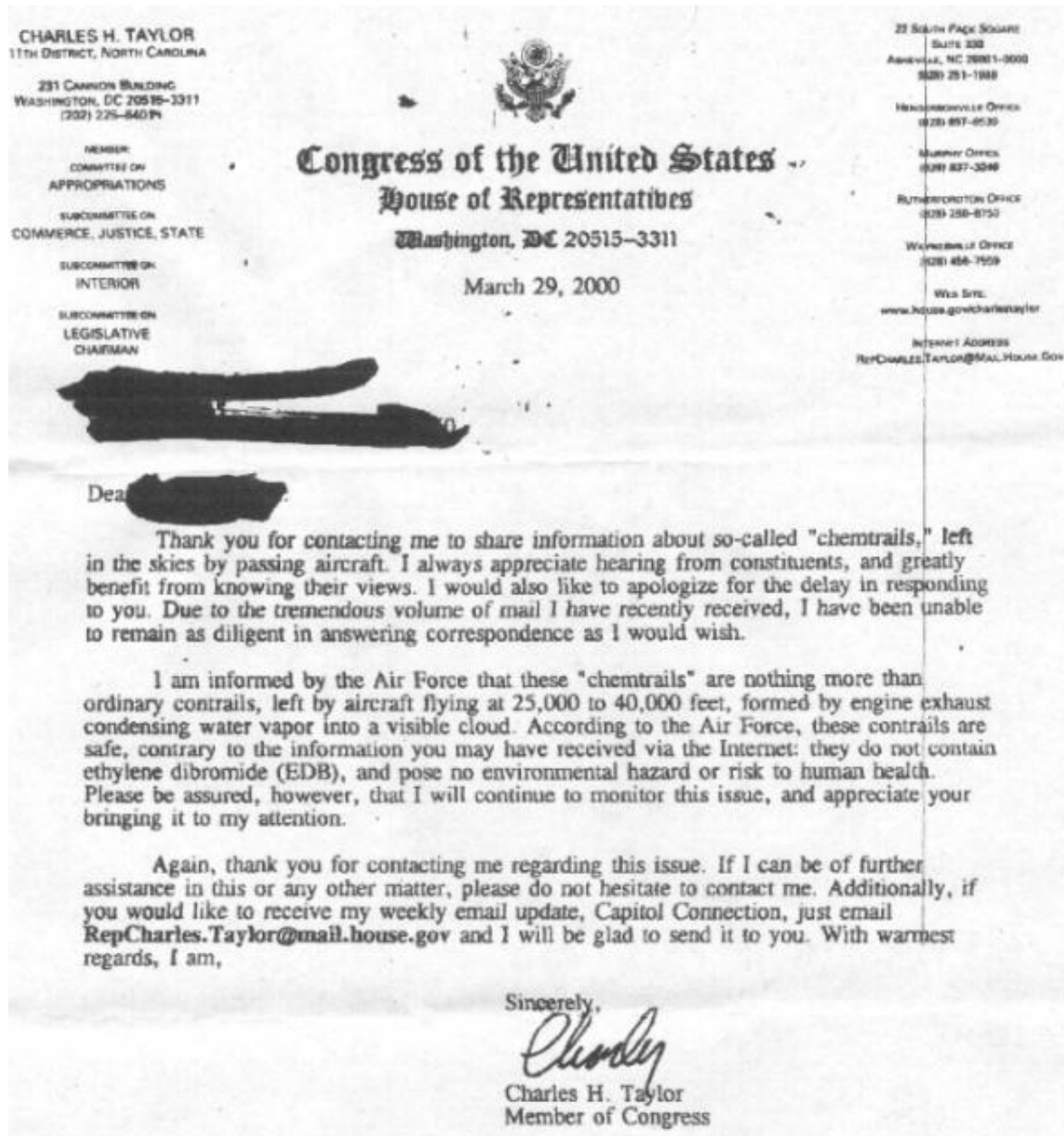
Feb 1, 2001

USAF TO TAYLOR:
ALL IS 'ORDINARY'

The following letter has been received by postal mail and is made available for the public record.

Clifford E Carnicom

Feb 01 2001



THE NUREMBERG CODE

Feb 1, 2001

THE NUREMBERG CODE

The following is an excerpt from the Nuremberg Code reprinted by the Office of Human Subjects Research – National Institutes of Health

<http://ohsr.od.nih.gov/nuremberg.php3>

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

Feb 1, 2001

**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'

Feb 1, 2001

**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 15 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. [REDACTED] 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. [REDACTED] 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.epa.gov>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks 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

Feb 1, 2001

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 peace, 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 towards 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 Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 1 June 1972,

Realizing that the use of environmental modification techniques for peaceful 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 future generations,

Recognizing, however, that military or any other hostile use of such techniques could have effects extremely harmful to human welfare,

Desiring to prohibit effectively military or any other hostile use of environmental modification techniques in order to eliminate the dangers to mankind from such use, and affirming their willingness to work towards the achievement of this objective,

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

Article I

1. Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

2. 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 provisions of paragraph 1 of this article.

Article II

As used in article I, the term "environmental modification techniques" refers to any technique for changing—through the deliberate manipulation of natural processes—the dynamics, composition or structure of the Earth, including its land, lithosphere, hydrosphere and atmosphere, or of outer space.

Article III

1. 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 fullest possible exchange of scientific and technological information on the use of environmental modification techniques for peaceful purposes. States Parties in a position to do so shall contribute, alone or together with other States or international organizations, to international economic and scientific co-operation in the preservation, improvement and peaceful utilization of the environment, with due consideration for the needs of the developing areas of the world.

Article IV

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

Article V

1. The States Parties to this Convention undertake to consult one 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 State Party to this Convention, convene a Consultative Committee of Experts. Any State Party may appoint an expert to the Committee whose functions and rules of procedure are set out in the annex, which constitutes an integral part of this Convention. The Committee shall transmit to the Depositary a summary of its findings of fact, incorporating all views and information presented to the Committee during its proceedings. The Depositary shall distribute the summary to all States Parties.

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

4. Each State Party to this Convention undertakes to cooperate in carrying out any investigation which the Security Council 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 undertakes to provide or support assistance, in accordance with the provisions of the Charter of the United Nations, to any State Party which so 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.

Article VI

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

2. An amendment shall enter into force 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 States Parties. Thereafter it shall enter into force for any remaining State Party on the date of deposit of its instrument of acceptance.

Article VII

This Convention shall be of unlimited duration.

Article VIII

1. Five years after the entry into force of this Convention, a conference of the States Parties to the Convention shall be convened by the Depositary at Geneva, Switzerland. The conference shall review the operation of the Convention with a view to ensuring that its purposes and provisions are being realized, and shall in particular examine the effectiveness of the provisions of paragraph 1 of article I 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 no conference has been convened pursuant to paragraph 2 of this article within ten years following the conclusion of a previous conference, the Depositary shall solicit the views of all States Parties to this Convention concerning the convening of such a conference. If one third or ten of the States Parties, whichever number is less, respond affirmatively, the Depositary shall take immediate steps to convene the conference.

Article IX

1. This Convention 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 signatory States. Instruments of ratification or accession

shall be deposited with the Secretary-General of the United Nations.

3. This Convention shall enter into force upon the deposit of instruments of ratification by twenty Governments in accordance 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 deposit of their instruments of ratification or accession.

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

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

Article X

This Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited 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 undersigned, being duly authorized thereto, have signed this Convention.

DONE at . . . , on the . . . day of

Annex to the Convention

Consultative Committee of Experts

1. The Consultative Committee of Experts shall undertake to 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 State Party requesting the convening of the Committee.

2. The work of the Consultative Committee of Experts shall be 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 consensus, but otherwise by a majority of those present and voting. There shall be no voting on matters of substance.

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

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

5. Each expert shall have the right, through the Chairman, to request from States, and from international organizations, such information and assistance as the expert considers desirable for the accomplishment of the Committee's work.

IDENTICAL FIBER SAMPLES RECEIVED

Feb 4, 2001

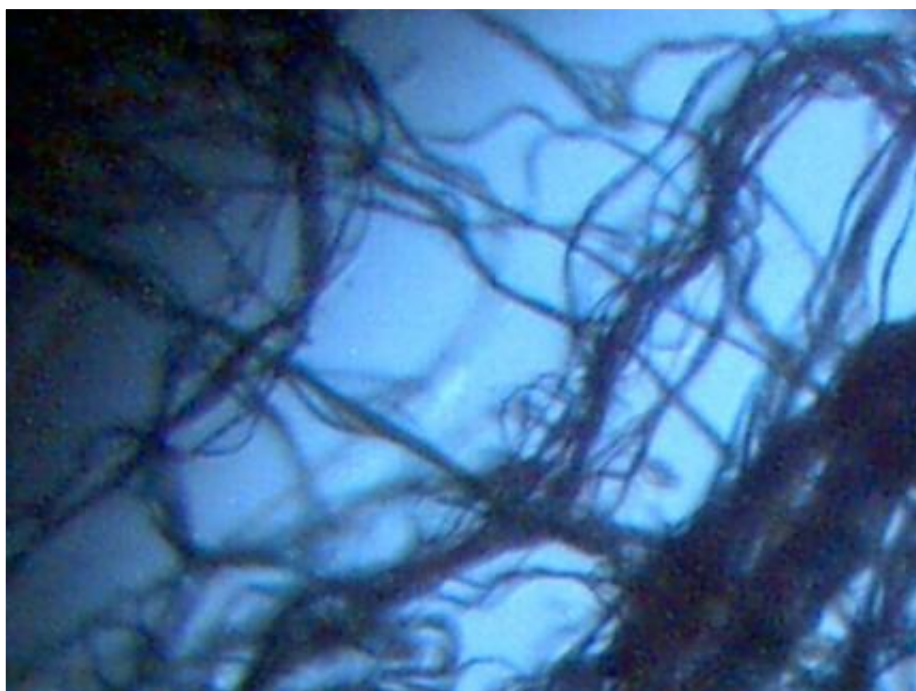
**IDENTICAL FIBER
SAMPLES RECEIVED**

Posted by

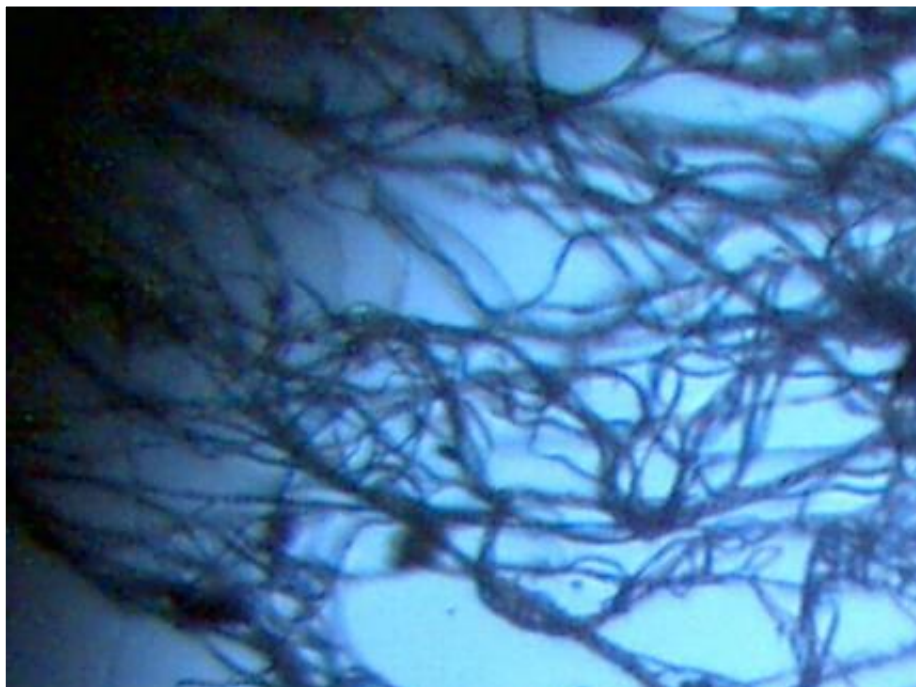
Clifford E Carnicom

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 [earlier](#). 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 [previously](#). 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

Feb 5, 2001

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

Feb 6, 2001

**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-"CLOUDS" RELATIONSHIP

Feb 24, 2001

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 [A Case For Testing](#), 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

Feb 25, 2001

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

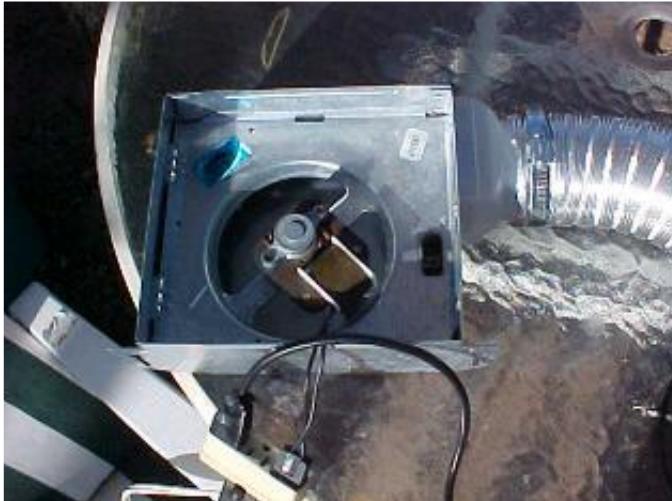
microscope glass surface through the process of electrostatic precipitation, and it can be subsequently analyzed under the microscope.



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

Feb 25, 2001

**BIOLOGICAL OPERATIONS
CONFIRMED**

Clifford E Carnicom

Feb 25 2001

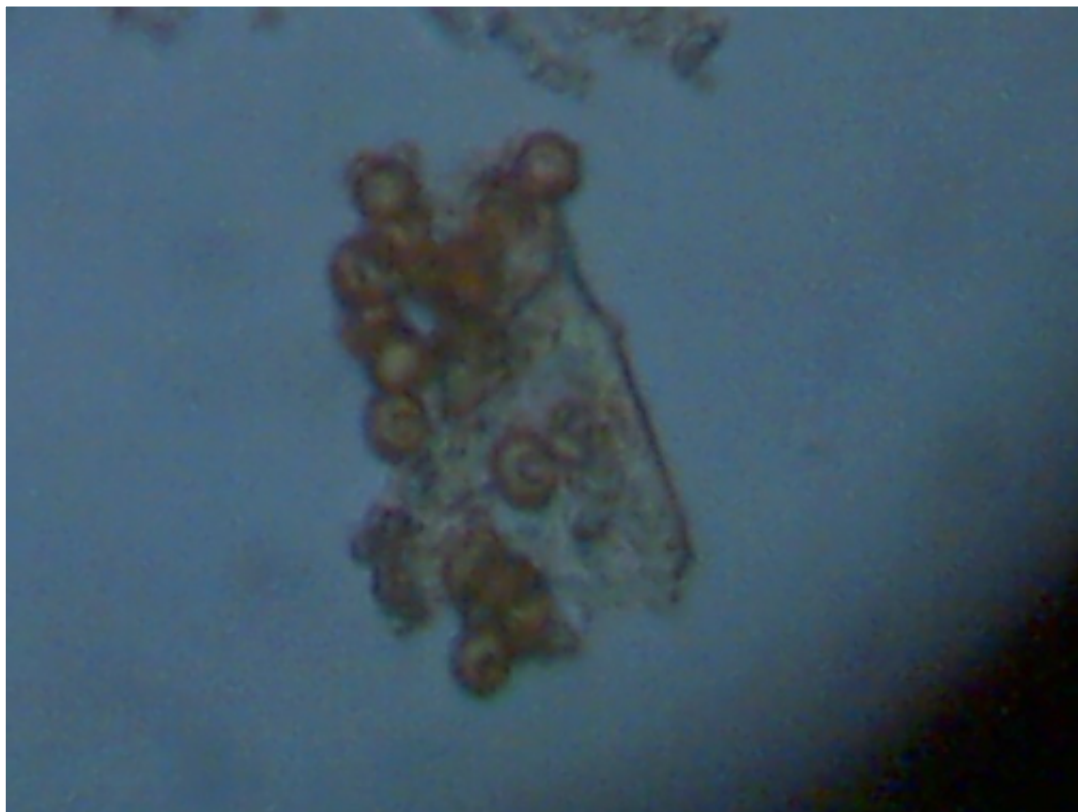
Edited Feb 28 2001, Edited Mar 15 2001, Edited Mar 21 2001

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.

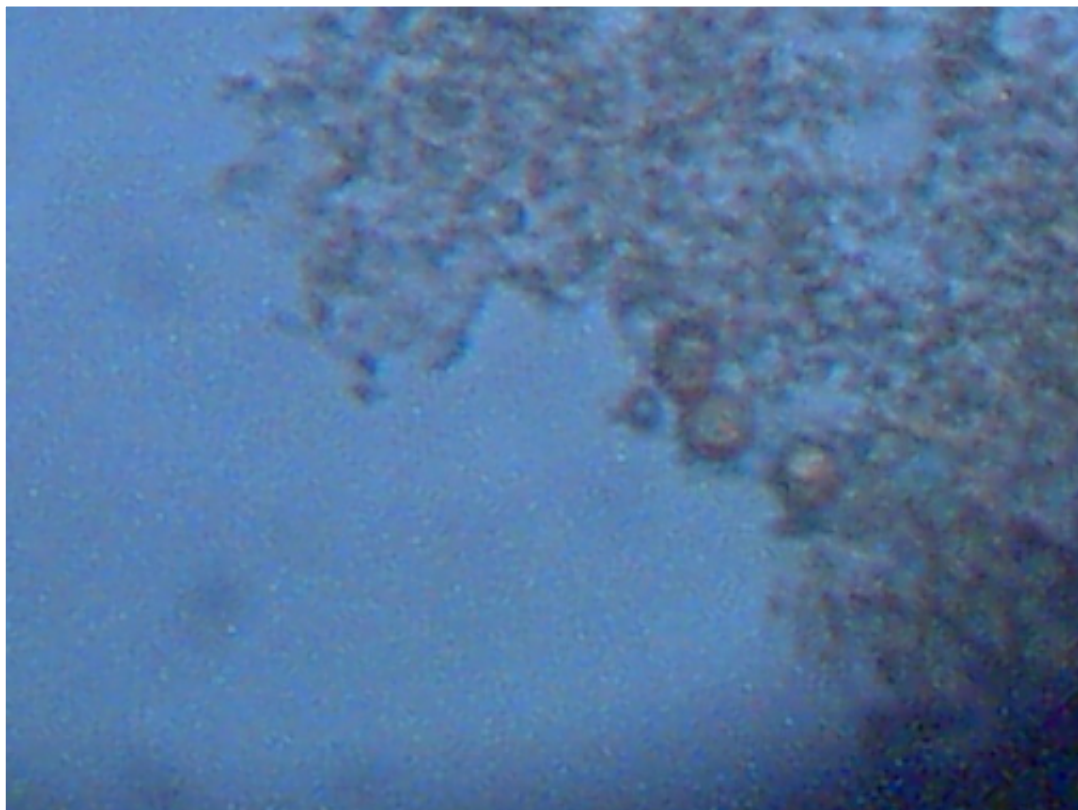
Research related to these findings will continue, and additional information will be presented as circumstances warrant. Air filtration and testing by more conventional methods involving HEPA filters also remains in progress.



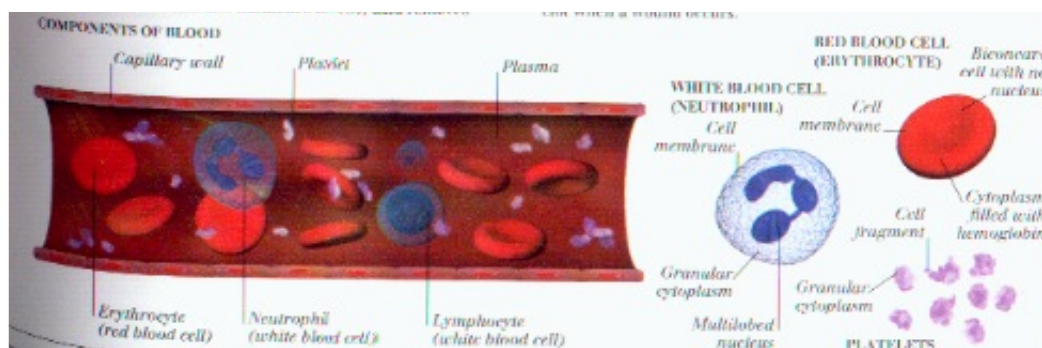
Red Blood Cells, Concavities Visible, approx. 2000x
Atmospheric Sample Santa Fe NM Feb 25 2001



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 Sizes

Source : 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 rbc’s – 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 rbc’s 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

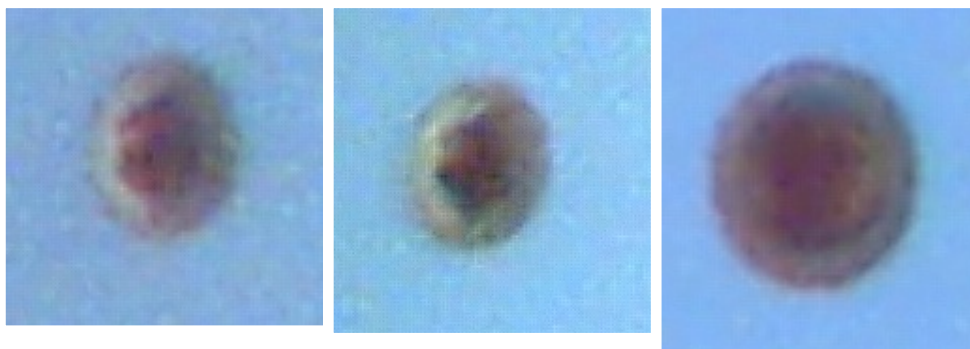
Purdue University
Veterinary Hematology Slide Review

(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

www.pollen.com

Edited Feb 28 2001

Edited Mar 15 2001

Edited Mar 21 2001

NIPR ACTIVITY INCREASES

Feb 28, 2001

NIPR ACTIVITY INCREASES

Visitation activity by NIPR.mil has increased dramatically over past several days to www.carnicom.com. As designated within the [visitors](#) 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 [message board](#) 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.

Mar
HEPA BIOLOGICALS CONFIRMED

Mar 6, 2001

**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 [found and reported](#) 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 [is available](#). 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 [electrostatic method](#). 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

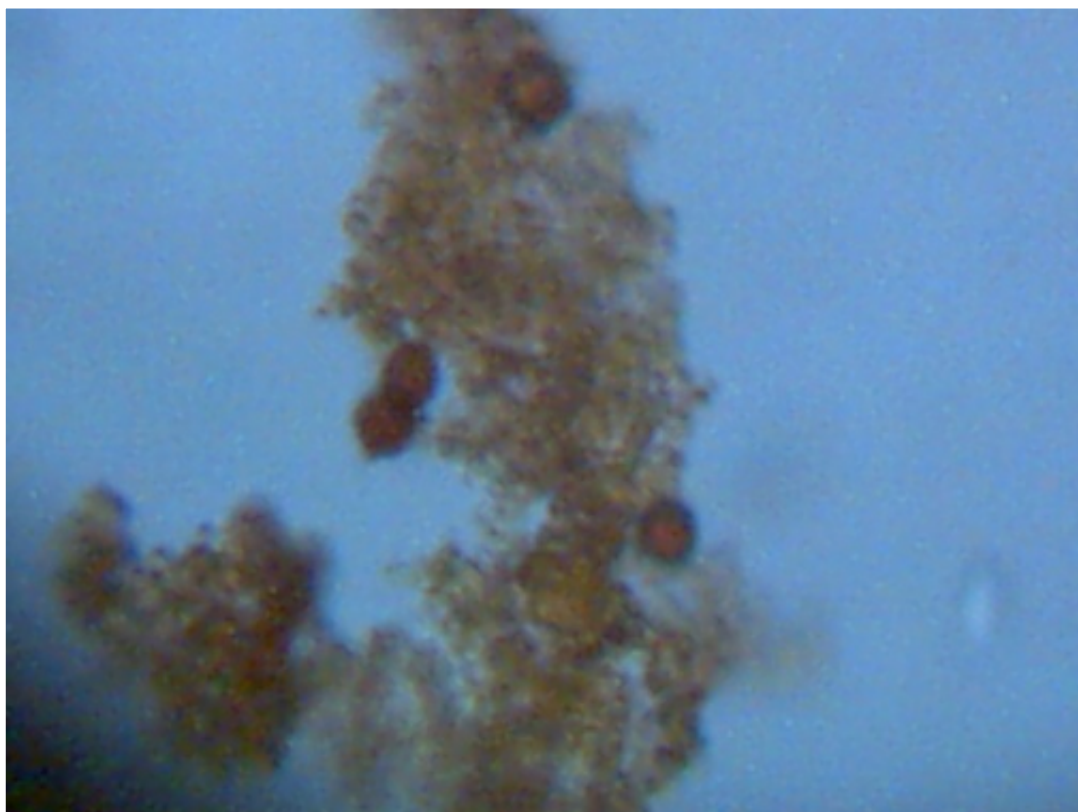
filtering operating independently over time are now producing identical results. These methods of filtering and identification are now available to all citizens with modest means. The identification of the cell types found , and an accountability for their existence is of critical importance to the public 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 Cartridge Exposed
Less Foam Cover Filter



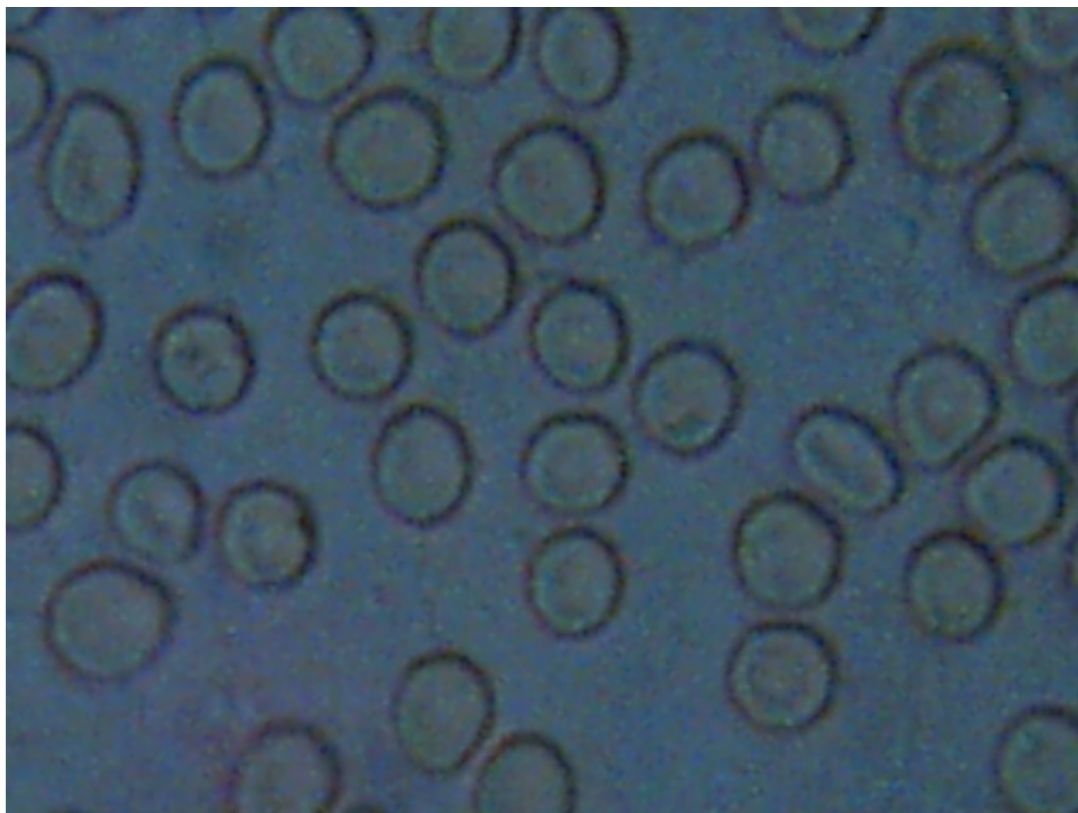
Biologicals Identified within HEPA Filter Cartridge
Exposure Time : One Week
Magnification : Approx. 2000x – Estimated Size : 5 microns



Biologicals Identified within HEPA Filter Cartridge

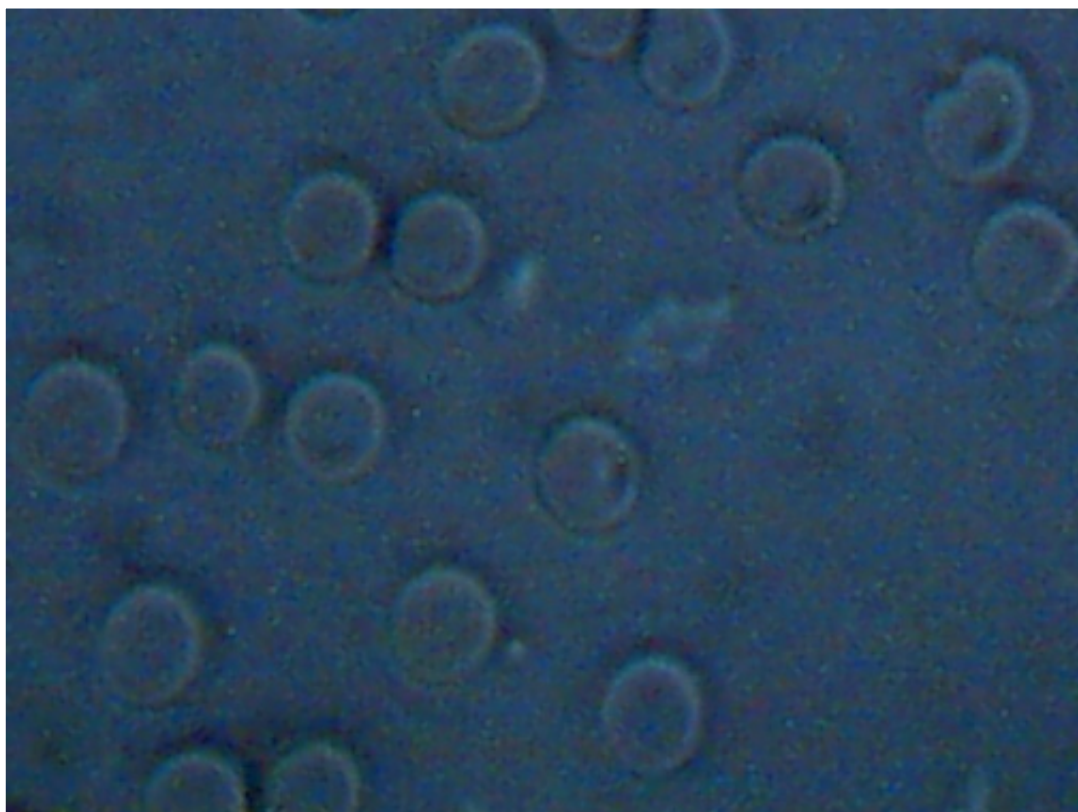
Exposure Time : One Week

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

Mar 8, 2001

**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 [link to this page](#) 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

Mar 12, 2001

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. $K \rightarrow K^+ + e$) 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

Mar 15, 2001

**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-tack-toe-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

Mar 16, 2001

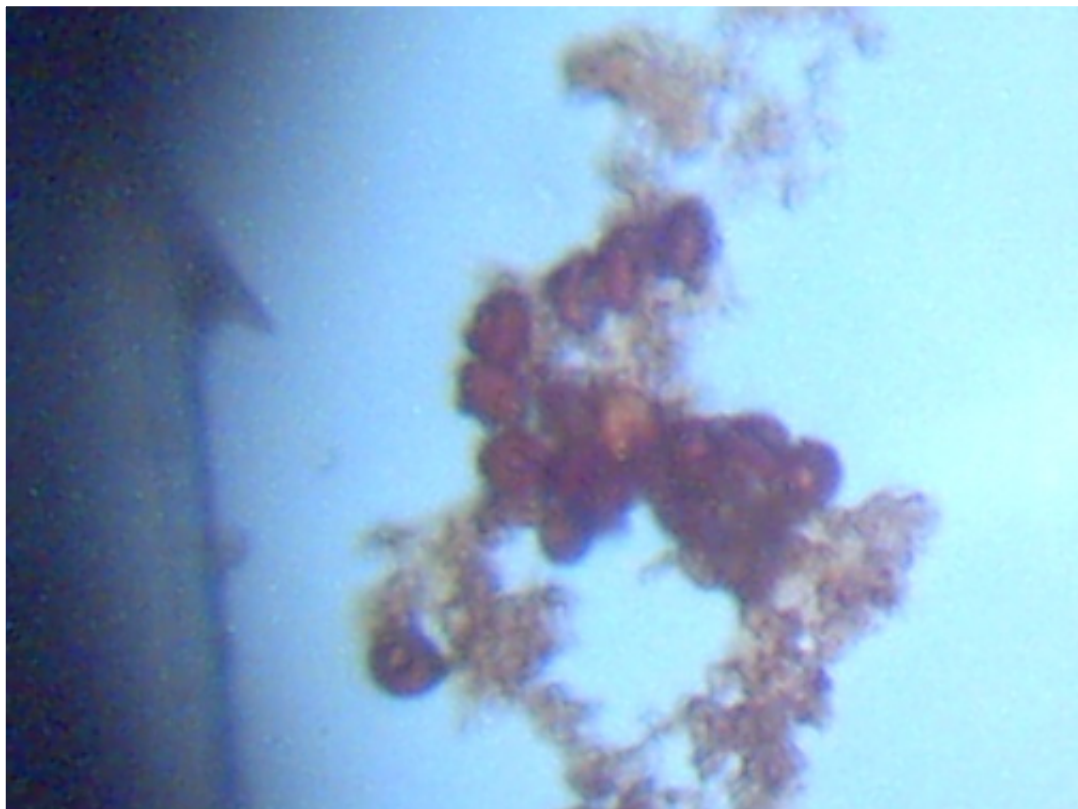
COLORADO HEPA BIOLOGICALS CONFIRMED

Clifford E Carnicom

Mar 16 2001

A second HEPA (High Efficiency Particulate Air) filter sample has now been analyzed 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 [first HEPA filter analysis](#) and the [electrostatic precipitation](#) 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 [earlier](#) airborne 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

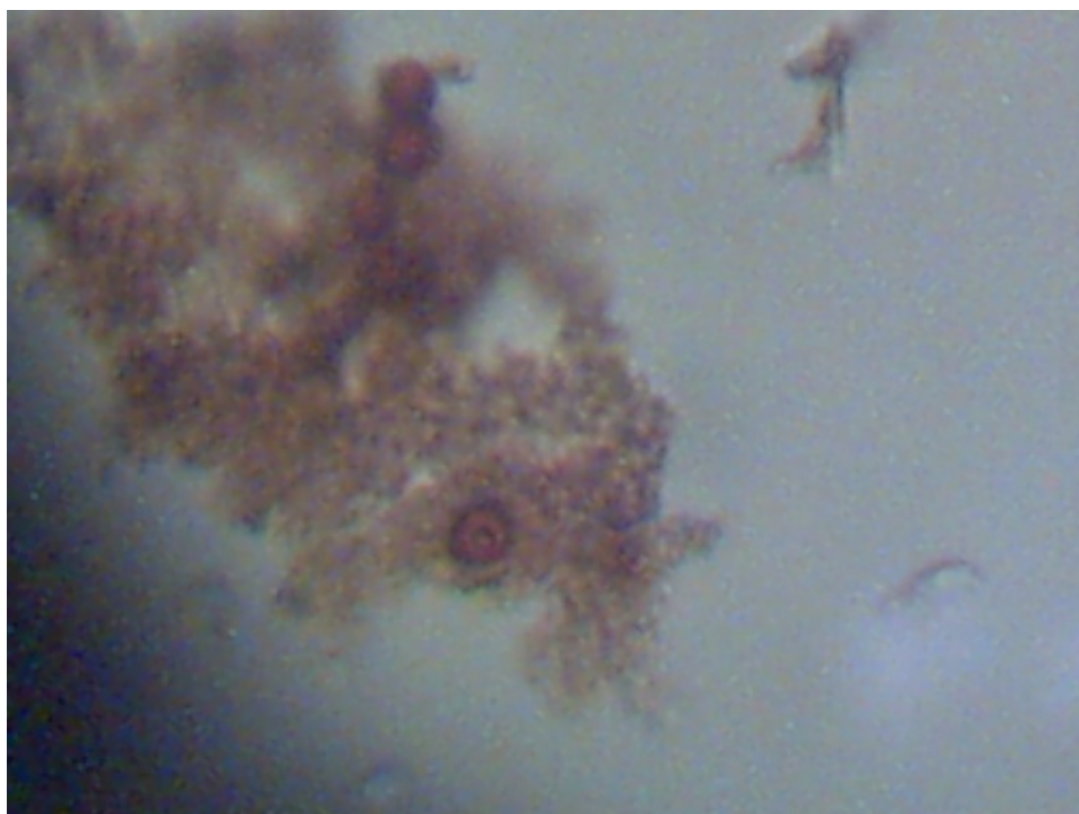
The only sufficient resolution to the questions raised is that of testing and positive identification. Discourse is insufficient.

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 ([note earlier studies](#)), 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 [previous](#) 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

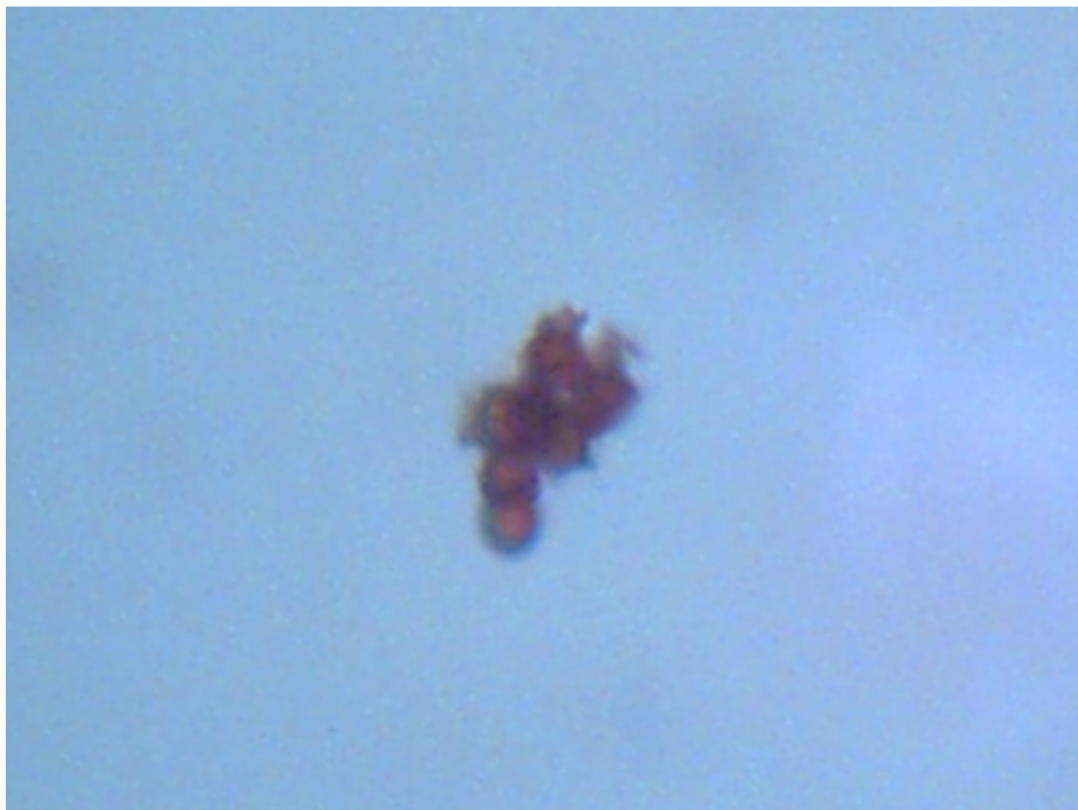


Biologicals Identified within HEPA Filter Cartridge

Note Concavity Visible Within Lower Cell

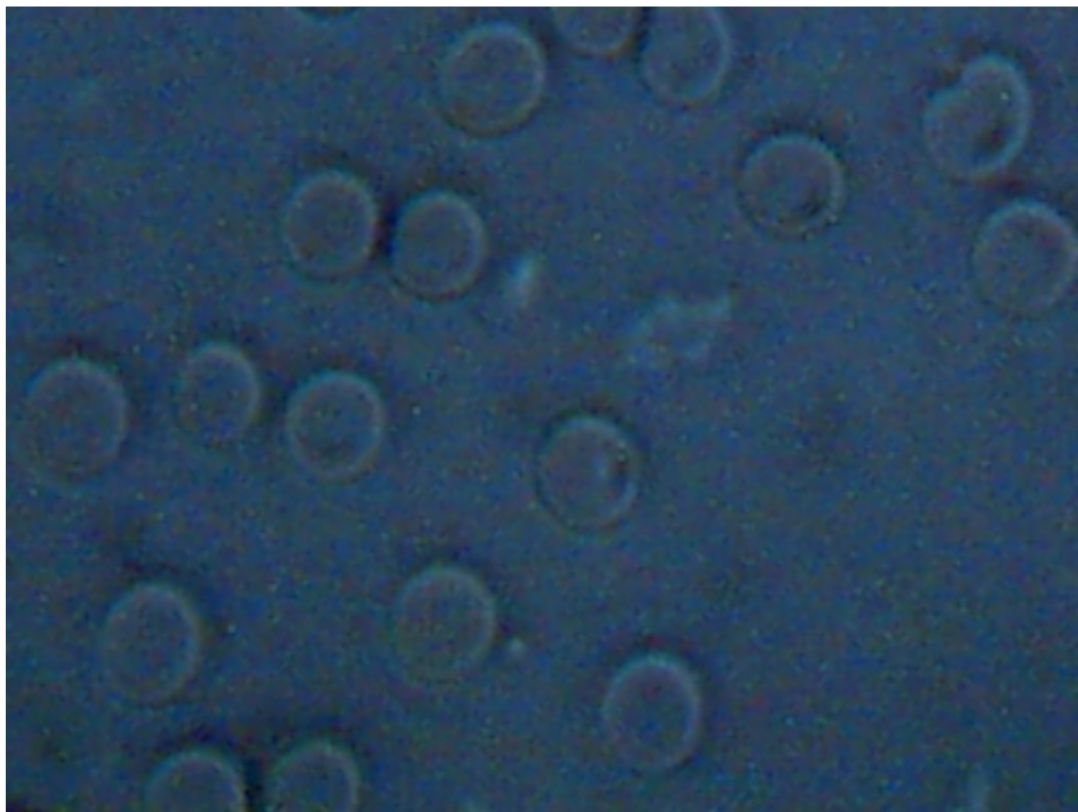
Exposure Time : 5 days

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

Mar 20, 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 cover-up? Is it possible that the facts of very real and progressive damage to all of our eco-systems 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

Mar 22, 2001

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 [Principles of Jet Engine Operation](#)). 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:

$$H = dH(\text{ice}) + dH(\text{melting}) + dH(\text{water}) + dH(\text{vap}) + dH(\text{steam})$$

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

$$-H = (1 \text{ gm}) (.5 \text{ cal} / (\text{gm} * \text{K})) (50 \text{ deg. K})$$

$$+ (1 \text{ gm}) (80 \text{ cal} / \text{gm})$$

$$+ (1 \text{ gm}) (1.0 \text{ cal} / (\text{gm} \cdot \text{K})) (100 \text{ deg. K})$$

$$+ (1 \text{ gm}) (540 \text{ cal} / \text{gm})$$

$$+ (1 \text{ gm}) (.33 \text{ cal} / \text{gm}) \cdot 900 \text{ deg. K})$$

or

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

Now,

$$1 \text{ calorie (cal)} = 4.1868 \text{ Joules (J)}$$

Therefore,

$$-1045 \text{ cal} = -4375 \text{ J.}$$

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:

$$(115 \times 10^{-6})^3 \text{ meters, or } 1.52 \times 10^{-12} \text{ cu. m.}$$

Since 1 gm. of water has a volume of $(1 \times 10^{-2})^3$ meters, the volume of a gram of water is (1×10^{-6}) cu. m.

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

$$1.52 \times 10^{-12} \text{ cu. m.} / 1 \times 10^{-6} \text{ cu. m.}$$

or

$$(1.52 \times 10^{-6})$$

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

$$(1.52 \times 10^{-6}) (4375 \text{ J}) = 6.654 \times 10^{-3} \text{ J. for a particle 115 microns thick and corresponding to a temperature change of } 1050 \text{ deg. C. [note units are therefore: J} / (\text{m} \cdot \text{K})]$$

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 -50 deg. C. is given as .012 Btu / (hr * ft * deg. F).

Converting this value to SI units,

$$.012 \text{ Btu} / (\text{hr} * \text{ft} * \text{deg F.}) \rightarrow (1055 \text{ J} / \text{Btu}) / ((3600 \text{ sec/hr}) * (.3048 \text{ m/ft.}) * ((5/9) \text{ deg. K} / \text{deg. F}))$$

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

$$.02075 \text{ J} / (\text{s} * \text{m} * \text{K})$$

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

$$(6.654\text{E-}3 \text{ J} / (\text{m} * \text{K})) / (.02075 \text{ J} / (\text{s} * \text{m} * \text{K})) = .321 \text{ seconds.}$$

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:

$$(733 \text{ ft./sec}) * .321 \text{ sec} = 235 \text{ feet behind the engines of the aircraft.}$$

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

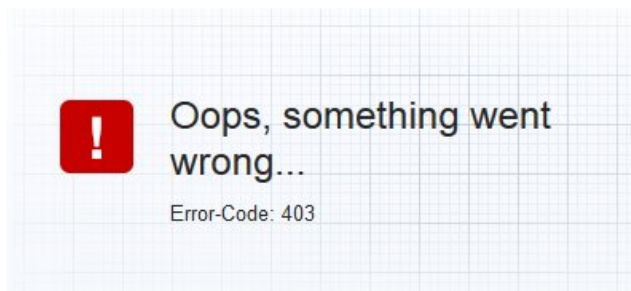
Mar 22 2001

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),

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

$$G = \frac{c_p p E I_{H_2O}}{(M_{H_2O}/M_{air}) Q_{fuel} (1 - \eta)}, \quad \eta = \frac{VF}{m_{fuel} Q_{fuel}}, \quad U_c = \frac{G(T - T_c) + p_{liq}(T_c)}{p_{liq}(T)} \quad (15.2)$$

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 contrail formation at lower altitudes and higher ambient temperatures.

For kerosene driven aircraft with $\eta = 0.3$, 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.
1. 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.
1. 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.



Mar

CONTRAIL DISTANCE FORMATION MODEL

Clifford E Carnicom

Jun 01, 2016

MAR 26 2001 HEPA: CELLS NOT FOUND

Mar 26, 2001

**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 analyzed 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

Mar 30, 2001

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:

<http://www.nws.noaa.gov/modernize/asostech.html>. 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 shows 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.

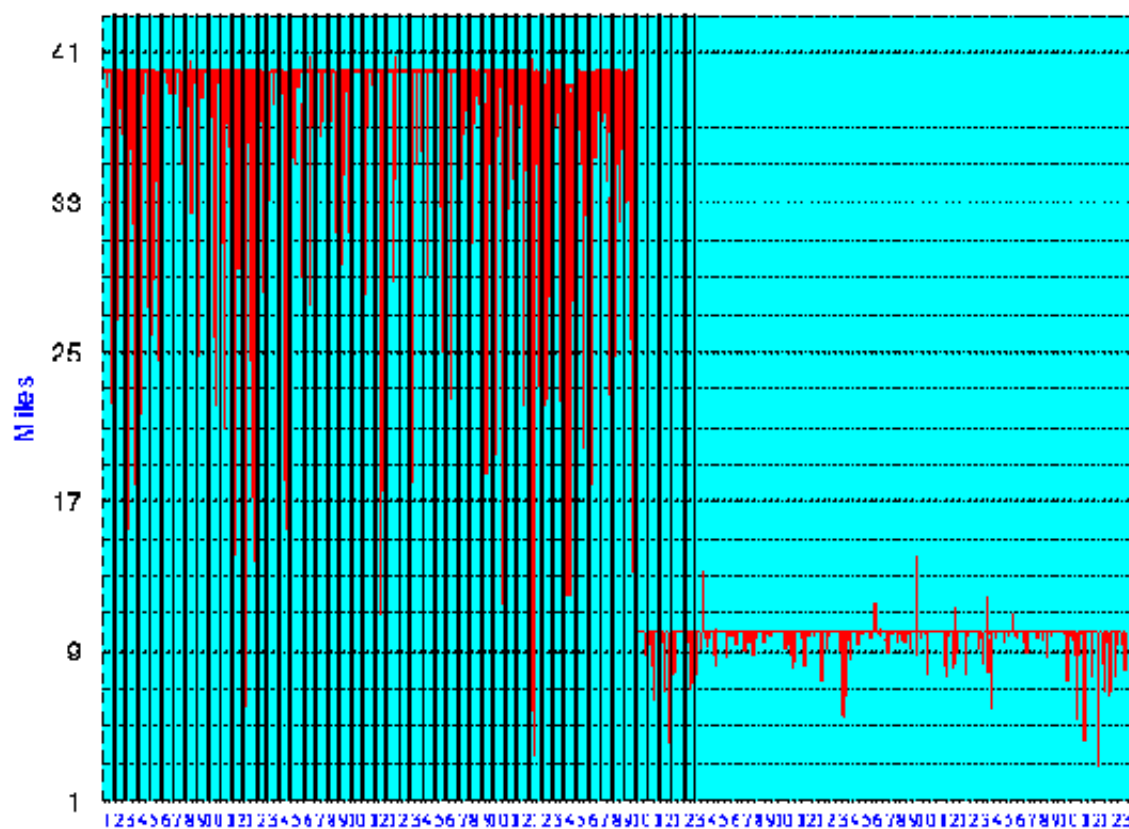
It will be valuable for other citizens to conduct similar archive research in varying geographic regions. This data is available on the NCDC site at <http://www.ncdc.noaa.gov/>.

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
JAN 1994 – MAR 2001**

SANTA FE CO. MUNI (New Mexico)

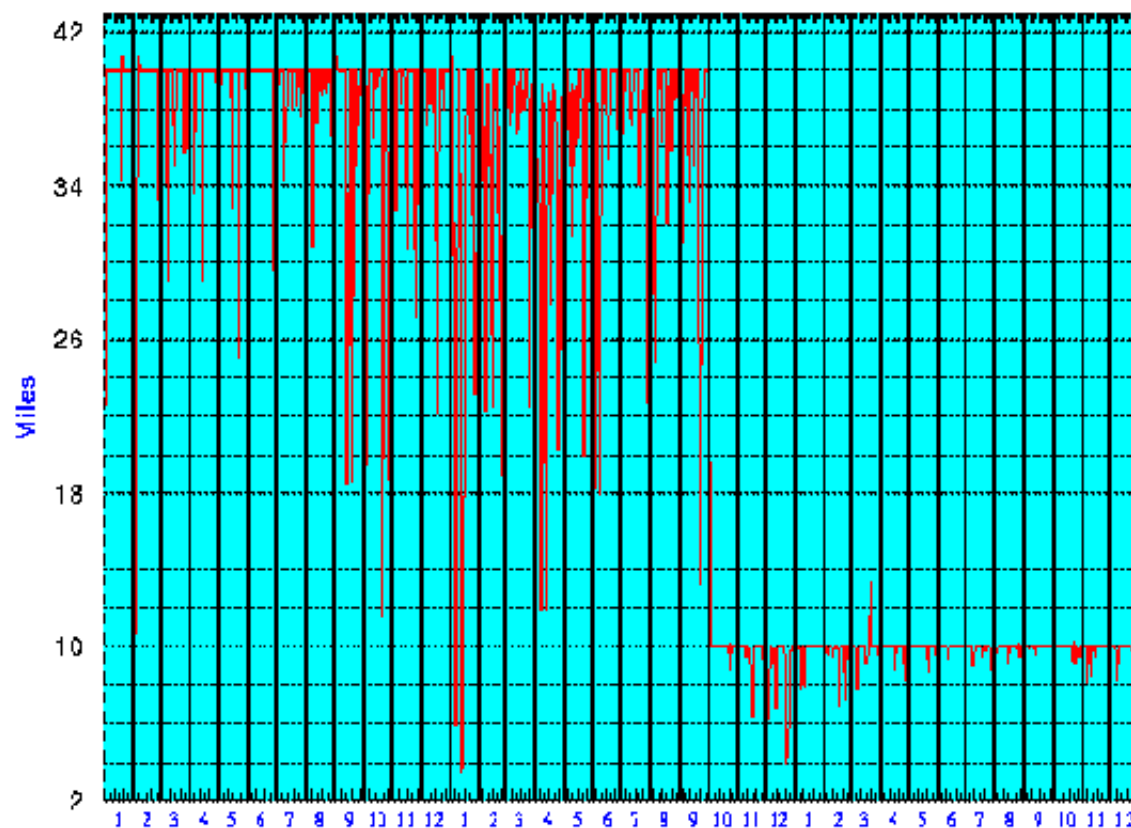
Mean Visibility



January, 1994 - March, 2001

SANTA FE CO. MUNI (New Mexico)

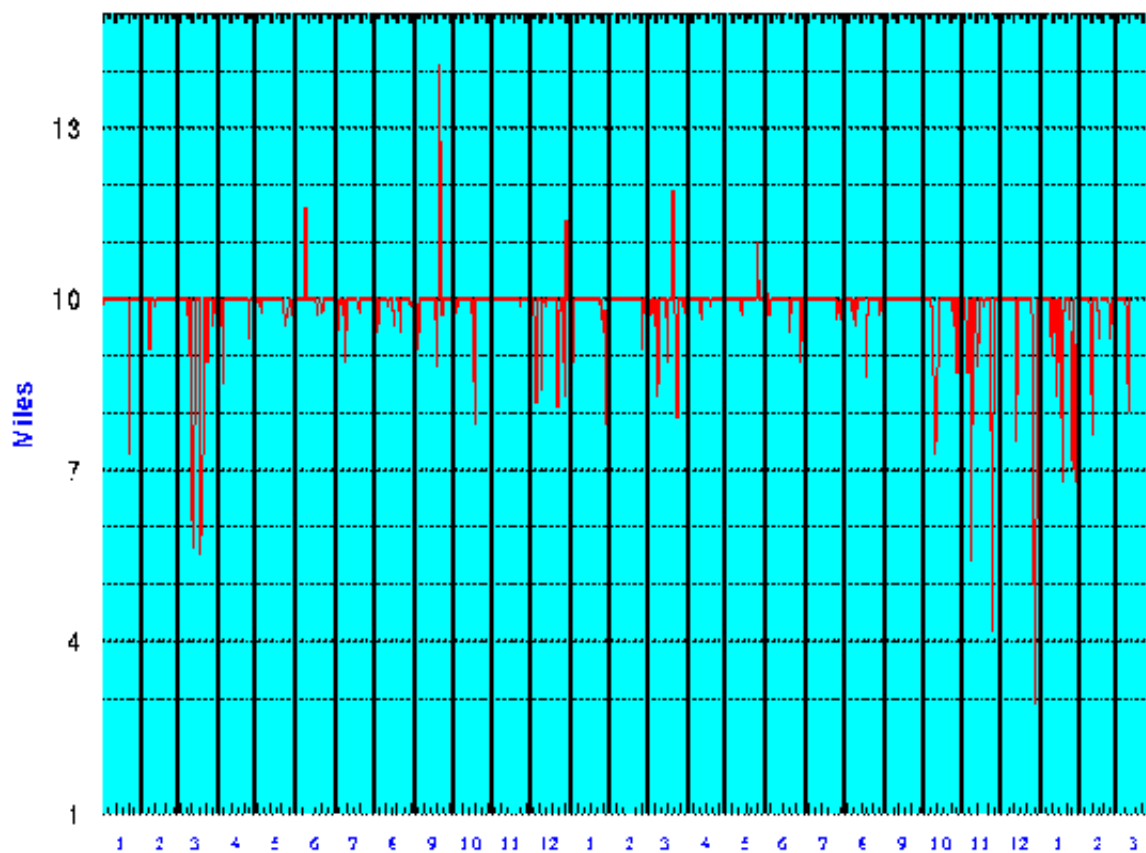
Mean Visibility



January, 1996 - December, 1998

SANTA FE CO. MUNI (New Mexico)

Mean Visibility



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

Apr
pH DATA CONFLICT
Apr 1, 2001

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 government 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:

<https://carnicominstitute.org/wp/rainfall-ph-test-reports/>

NIPR.MIL 10 1/2 HOUR VISIT

Apr 1, 2001

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 [visitors](#) 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 [earlier page](#) which describes increased NIPR activity on this website.

PARTICULATES REAFFIRMED

Apr 6, 2001

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 [previous documentation](#) on this subject. Note also that significant numbers of biological materials were [subsequently identified under the microscope](#) 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

Apr 6, 2001

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 sub-micron to several microns in size. [See previous study.](#)
2. Materials are expected to be hygroscopic, i.e., water loving (e.g., some metallic salt forms), in nature. [See previous study.](#)
3. Materials are expected to be ionizable by visible light or near ultra-violet wavelenths. [See previous study.](#)
4. Materials are expected to possess a fairly high degree of solubility. [See previous study.](#)
5. Materials are expected to be alkaline in nature. [See previous study.](#)
6. Particulate aerosol materials are visible under specific lighting conditions. [See previous report](#)
7. Particulate aerosol materials exhibit electrically charged (ionized) motion. [See 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. [See previous study.](#)
9. Visible particulate matter must be chemically identified. [See previous report.](#)
10. Spectrometry data indicating the presence of unexpected elements must be considered. [See previous study.](#)
11. Relative humidity studies and particulate water absorption characteristics must be considered. [See previous study.](#)
12. pH rainfall data results, indicating a significant increase in soluble hydroxides must be incorporated with any analysis. [See previous study.](#)
13. Electrolysis examination of rainfall samples must be conducted and provide results that are consistent with an observed increase in alkalinity (increased ionic distribution). [See previous report.](#)
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. [See previous report.](#)

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. [See previous report.](#)

16. A comprehensive consideration of both electromagnetic and biological aspects with respect to the accumulated observations and data must take place. [See previous report.](#)

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 [1,2,3.](#)

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. [See previous record.](#)

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

Apr 7, 2001

**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 (<http://www.mos.org/sln/sem/staining.html>) 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 safranin; 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.

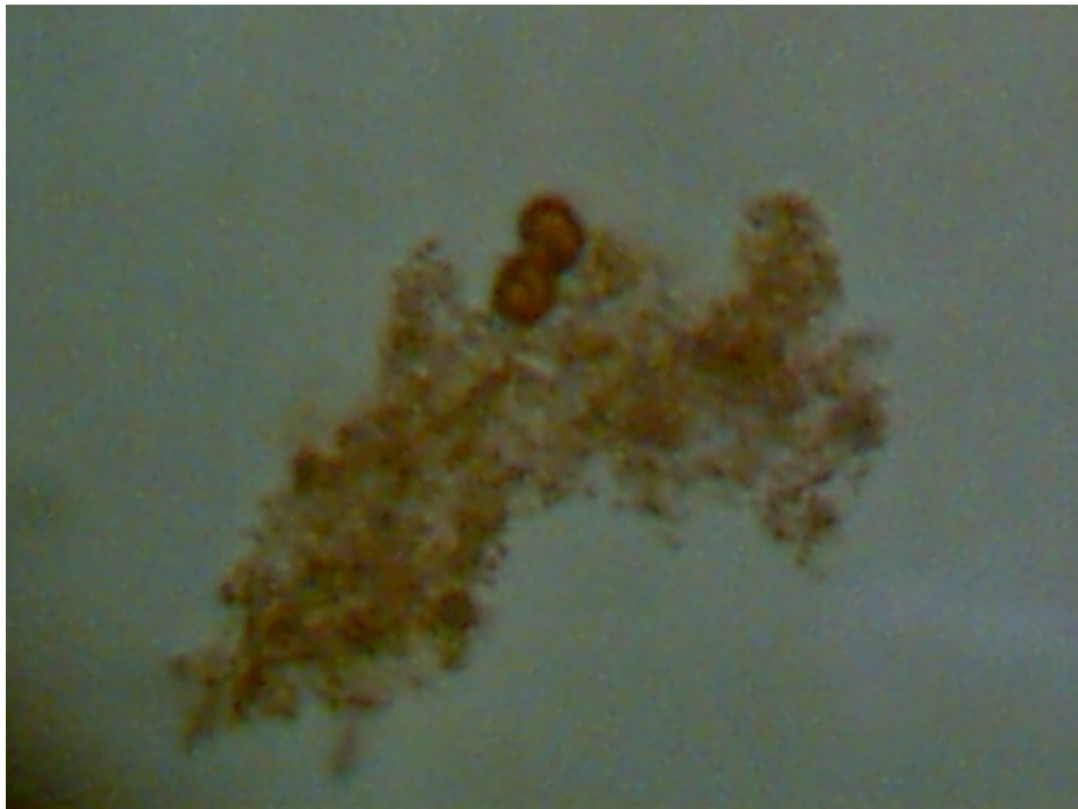
Clifford E Carnicom

April 07 2001

APR 08 2001 : BIOLOGICALS REAFFIRMED

Apr 8, 2001

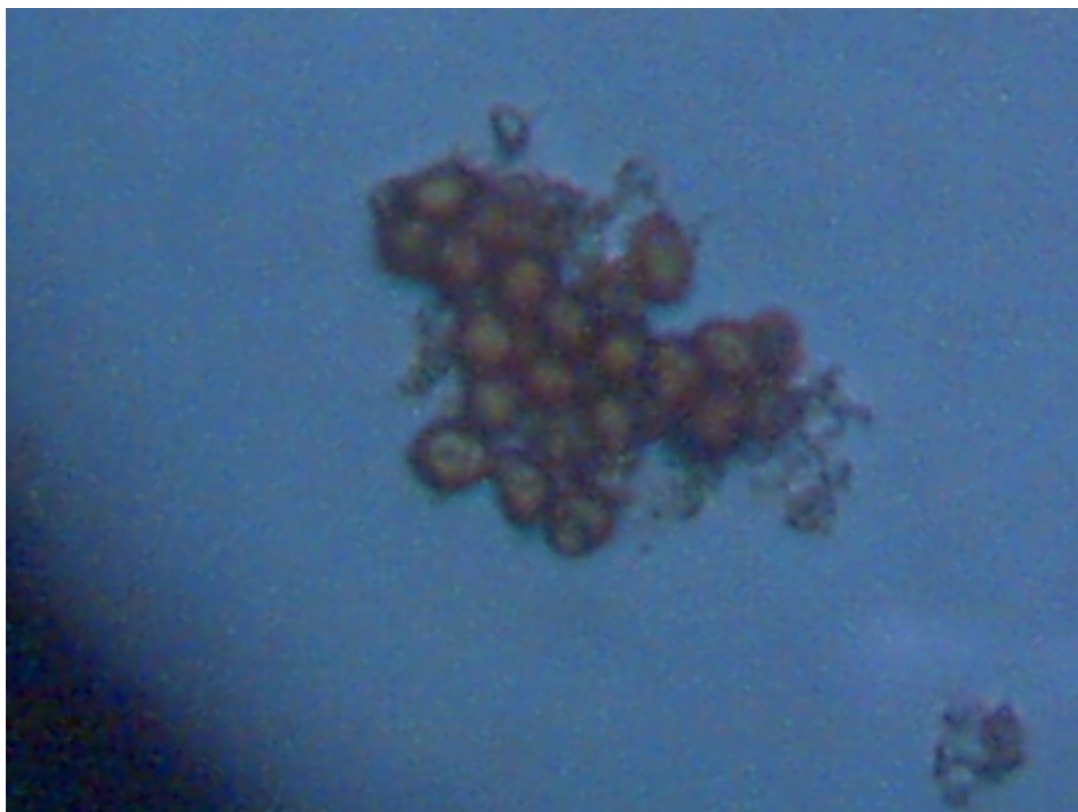
**APR 08 2001 :
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Clifford E Carnicom
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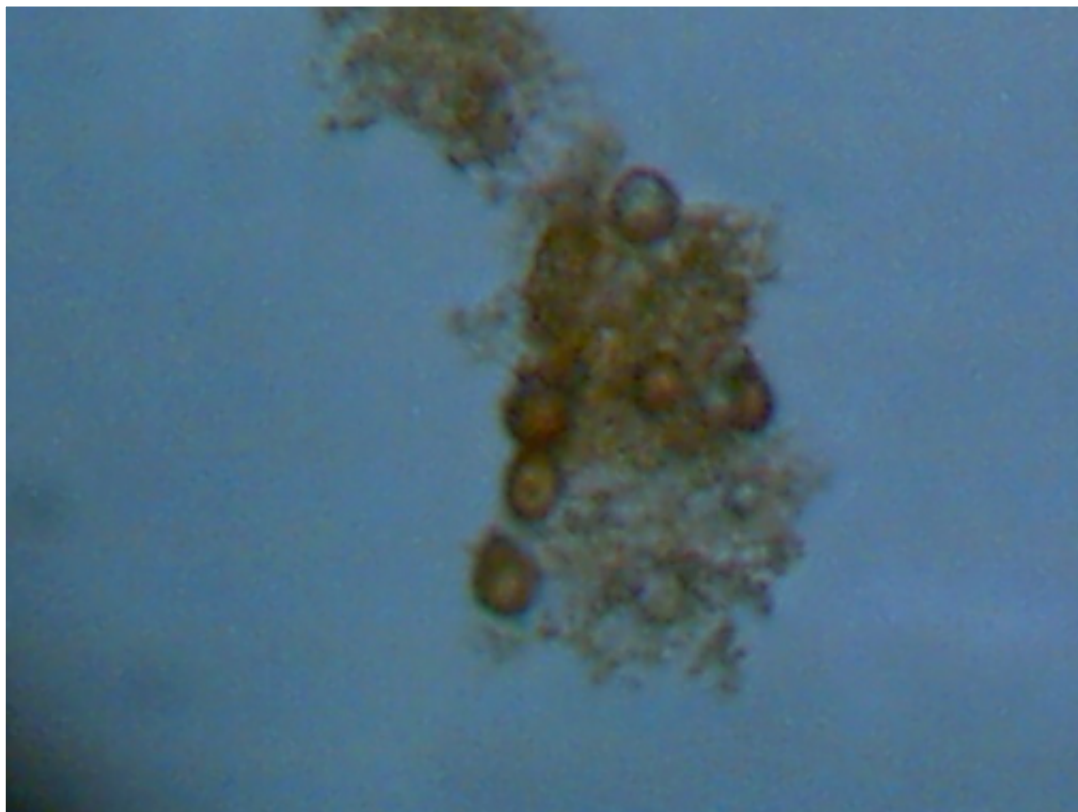


The abundant presence of biological components within an atmospheric sample processed by electrostatic precipitation in Santa Fe, NM on April 08, 2001 is again demonstrated. These biological components occurring within a maxtrix or base material by all appearances again satisfy the visual properties 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

Apr 12, 2001

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:

$$RH_{\min} = \frac{c + (.02c - .41)t}{(.003c - .14)}$$

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

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 meteorological 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 [aerosol report page](#).

This model is in addition to that [previously developed](#) that predicts contrail dissipation times, as well as a model to [predict the distance](#) behind the engines that the contrail is expected to form.

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

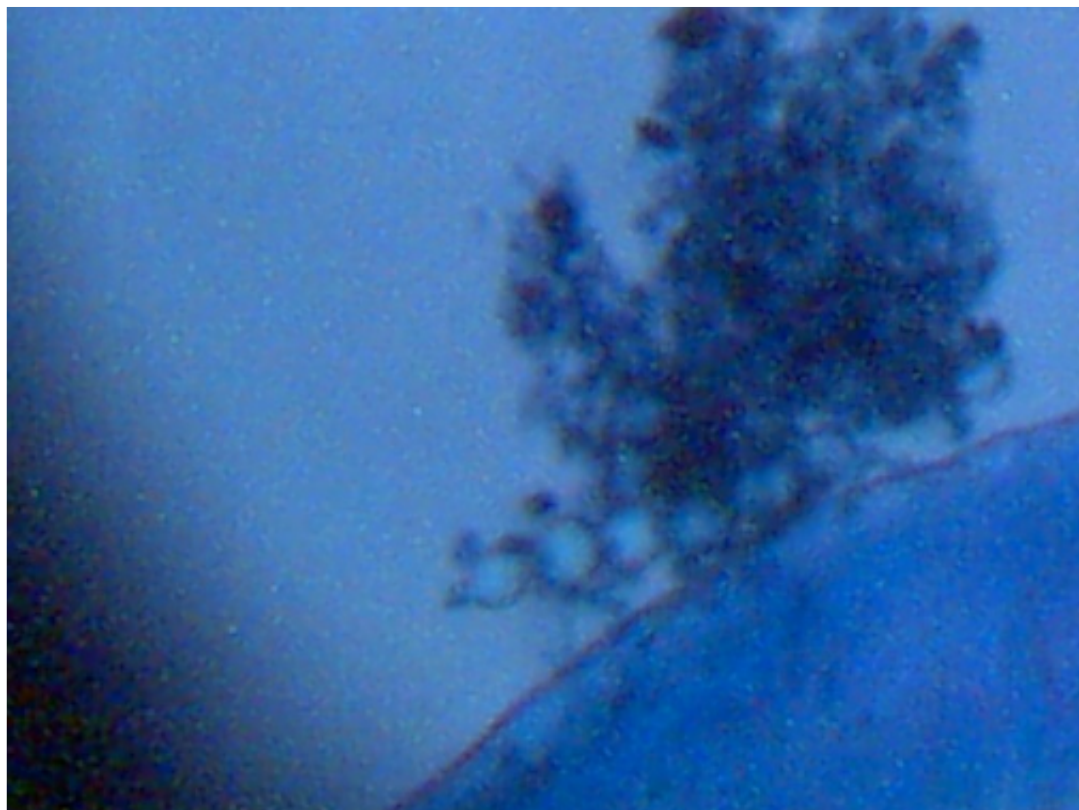
IDENTIFICATION REQUESTED

Apr 19, 2001

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

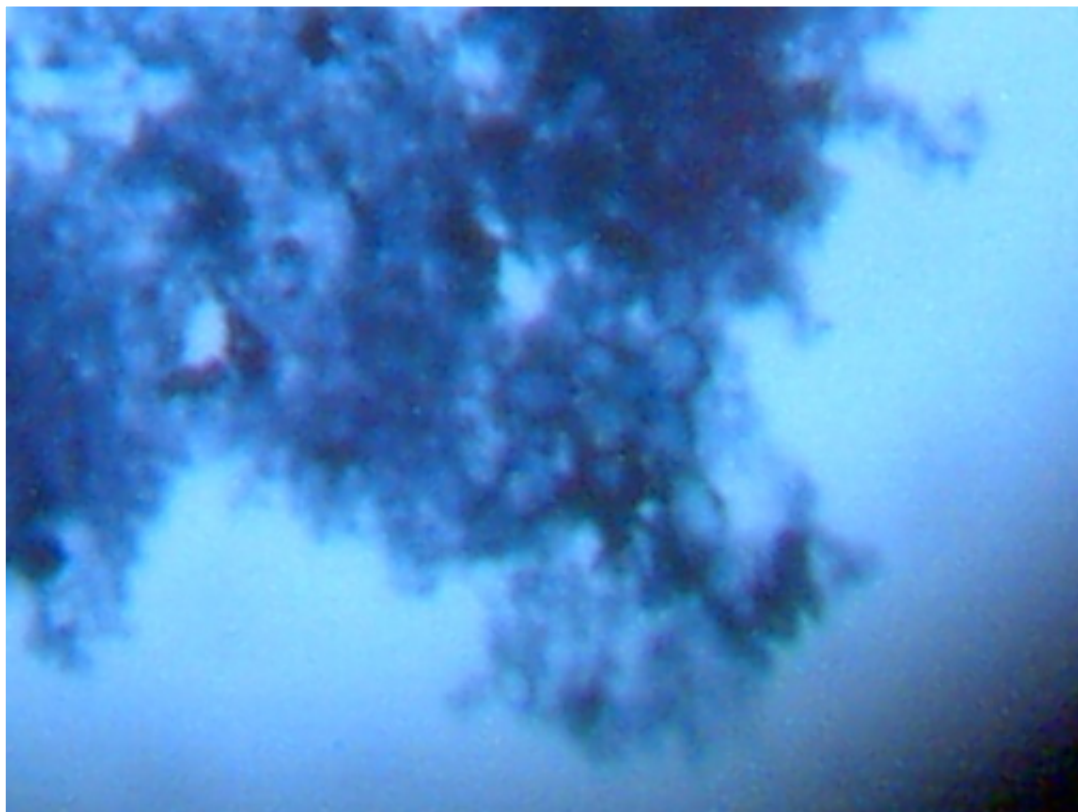
equally important to identify. The frequency, abundance and repetition of the materials observed within any single sample set appears to be highly unusual. The materials readily accept methylene blue stain after heat fixing. The materials shown here do not appear to be visible using the simple iodine 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.



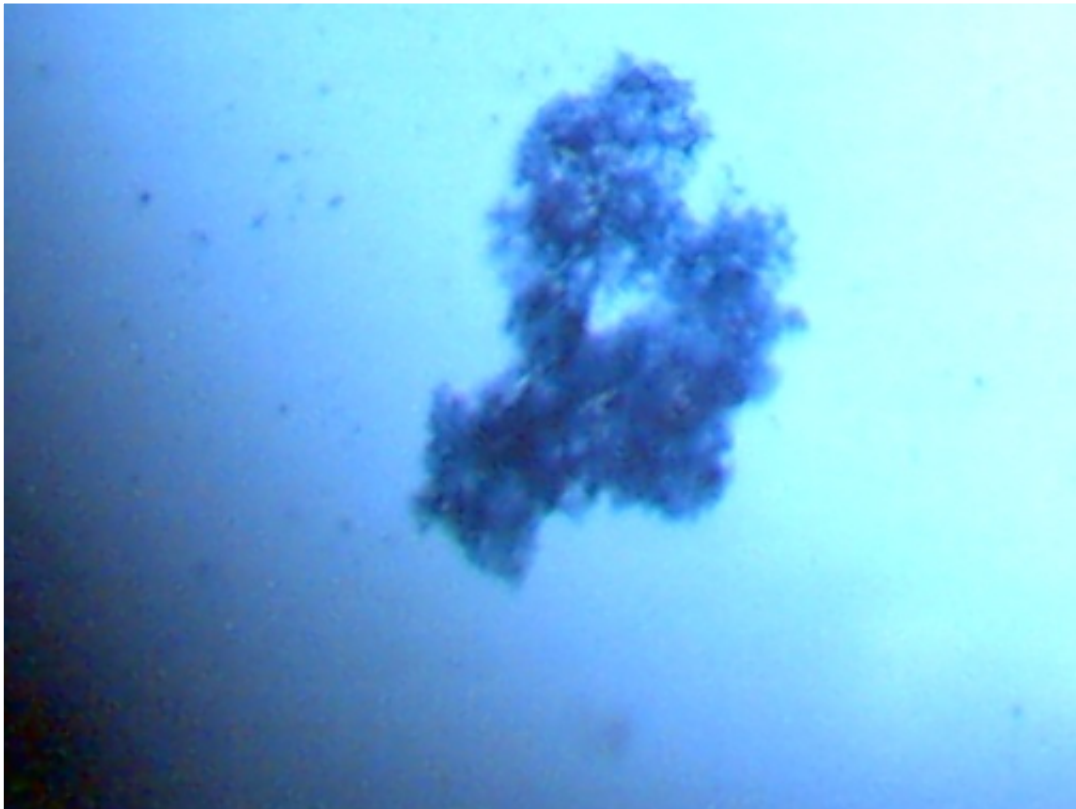
**Note biological cluster structure amidst surrounding matrix material.
Approx. 2000x**



**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

Apr 20, 2001

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 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