

Illegal Aerosol Spraying Operations over United Kingdom Airspace

An Informal Report

And

**Request for Immediate, Serious
and Candid Study**

by

**Department of Environment,
Civil Aviation Authority,
Royal Air Force**

and any other bodies with expertise or interest.

V1.1 June 2007

*Andrew Johnson
22 Mear Drive
Borrowash
Derbyshire
DE72 3QW
e-mail: ad.johnson@ntlworld.com*

Response from WWF UK (they have a campaign about Carbon Footprints)

-----Original Message-----

From: Supporterresponse Supporterresponse
[mailto:Supporterresponse@wwf.org.uk]

Sent: 11 June 2007 15:28

To: ad.johnson@ntlworld.com Subject: 512434789/MD

Dear Andrew,

Thank you for your letter concerning climate change.

I appreciate your comments that climate change is natural. Throughout its life the earth has moved from cold periods - ice ages - to warmer periods - interglacials. We are in an interglacial now, the temperature is about 4 degrees centigrade warmer than during the last ice age which ended 20,000 years ago.

However, over the last 150 years or so it has been observed that this warming has accelerated. It is now 0.5 degrees centigrade warmer than it was in 1860 - a huge change for 130 years considering there was only a rise of 4 degrees centigrade in the last 20,000 years.

Furthermore, the last century was the warmest century for 600 years and the last 2 decades of the 20th Century were the warmest on record. The speed at which the change is happening, leads us to the belief that it is not a completely natural change. The current science looking at the issue has concluded that there is a 'discernible human influence on climate change.' This human influence is mainly a result of increases in CO2 (carbon dioxide) emissions from the burning of fossil fuels to produce energy.

Whilst CO2 is a naturally occurring gas, during the last 150 years or so (since the Industrial Revolution), there has been a dramatic increase in our emissions of CO2, mainly through the burning of fossil fuels to produce energy (i.e. power generation, transport and industry) and it is this increase that is responsible for the accelerated warming.

For more information on this, please see "The Science of Climate Change - A Short Overview", report on www.panda.org.

WWF believes that each person can take responsibility for their impact on climate change. Especially when one considers the fact that 36% of the UK's CO2 emissions come from us driving our cars and heating and powering our homes.

By switching to a green electricity supply you can support the development of renewable energy resources within the UK. Renewable energy sources are defined as energy sources which occur naturally and repeatedly in the environment and which can be harnessed for human benefit. There are many forms of renewable energy, including wind, wave and solar power. They can be used for both electricity and heat generation. For example, the burning of biomass produces heat that can be recovered and distributed locally. The main benefit of using wind, solar and wave renewable technology is that the emissions of greenhouse gases (CO2 in particular) zero compared to those associated with fossil fuel use.

WWF are also looking at how domestic users can reduce their energy use. This includes things such as buying energy saving light bulbs, switching off appliances and lights when not in use, insulating your home properly and buying energy efficient appliances.

The changes in the local and global climate we are seeing is expected to have a number of significant impacts. Ice sheets, already showing signs of retreat will continue to melt, increasing the incidence of avalanches and dramatically changing river flows. This shrinking of the ice sheets will have major impacts on the Arctic and Antarctic habitats, affecting Polar Bears (Arctic) and Penguins (Antarctic). There is also evidence that the Siberian Tiger could be squeezed out of its Tundra habitat. Snow on mountain ranges is melting, the snow line is retreating. Species such as the Ptarmigan in Scotland could simply run out of habitat.

There is also the risk of an increasing number of pests and diseases in the UK as conditions for their survival become more favourable and more unusual weather conditions will be seen - the UK will become more stormy with 10% more rainfall which will lead to more flooding.

I appreciate your comments about climate change and global warming and hope you have found this letter both helpful and informative. Please be assured that these events are already taking place and therefore it is essential that we do everything that we can to conserve energy and the environment for current and future generations.

Thank you for taking the time to contact us and for letting us know your views.

Yours sincerely,

Supporter Relations

1. Introduction

1.1 Background to this Submission

For the last 2 years, since photographing the scene shown below, from my study room's window, I have become increasingly concerned about persistent aircraft trails in the skies over the UK. It seems to be the case that official denial surrounds this very important issue - which affects all of us.



Borrowash, 10th June 2005

I have supplied a selection of information in this document, and I freely admit that I am not an expert in climatology, chemistry or meteorology. However, I do have a Bachelor's degree in Computer Science and Physics and have a background in Software Engineering and education, which has involved a considerable amount of technical analysis in several different fields of work. In summary, I'm not stupid, nor am I given to jumping to conclusions, without analysing available evidence.

No pretences are made, however, about the nature of this submission: it is not a detailed scientific analysis, nor is it particularly comprehensive. This is because it has been produced quickly and with the limited resources of one

person. This should not detract, however, from the important discussion of basic evidence which it is designed to initiate and encourage.

1.2 Notes About Possible Responses To This Submission

I am not the first to notice or write about this phenomenon, nor am I the first to challenge official bodies about it, so in this section I have included some responses given to challenges made in the USA.

I may be one of the first to submit a "challenge" to official bodies in the UK and I have provided these sample responses as ones which can be classed as inadequate and unacceptable - i.e. these responses are not worth the paper they are written on. If you should choose to respond in a manner similar to that of the responses given below, there is little point in responding at all - it will achieve nothing and will not address the facts and evidence presented here.

The key point is this - just because I cannot clearly say why someone is deliberately spraying substances into our atmosphere does not mean it is not happening. To make a comparison, if there are road works going on outside my house, I may not easily be able to determine whether they are laying cables, doing maintenance, laying a new pipeline or doing some exploratory digging. For me to then say "well, I do not know what the purpose of these road works is, therefore they must not be happening" is illogical and denies the reality of the evidence.

Directorate of Airspace Policy
Environmental Research and Consultancy Department



Mr Andrew Johnson
22 Mear Drive
Borrowash
Derbyshire
DE72 3QW

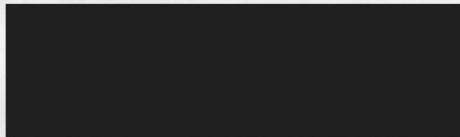
20 June 2007

Dear Mr Johnson

AIRCRAFT EMISSIONS

1. Thank you for your report entitled 'Illegal Aerosol Spraying Operations over United Kingdom Airspace' dated May 2007.
2. The photographs and satellite images contained within your report all feature contrails that are a by-product of the combustion of kerosene (aviation fuel) under certain meteorological conditions. In summary, when fuel burns it combines with oxygen to form carbon dioxide and water. The water can form ice crystals that appear to observers on the ground as contrails. Dependent on a number of factors including relative humidity, these contrails can dissipate or may persist. You make the comparison of contrails with exhaled breath on a cold winter day and seem suggest that because contrails sometimes persist unlike exhaled breath that the contrails must therefore consist of something other than water. The difference between the two situations is that contrails occur in very cold ambient conditions and the water content forms as ice crystals. Even in the coldest conditions exhaled breath at ground level does not form into ice crystals and the exhaled breath analogy does not form a complete explanation of contrail formation. Furthermore, research has indicated that whether a contrail forms or not is quite sensitive to meteorological conditions. One study produced recently has argued that changing aircraft altitude by a few thousand feet can affect whether a contrail is formed or not.
3. Contrail formation and other aviation emissions are the subject of much ongoing research by a variety of agencies and academic institutions in the UK and internationally. It is considered seriously because of the potential impact on climate change.

Yours sincerely



Civil Aviation Authority
CAA House K404/405 45-59 Kingsway London WC2B 6TE www.caa.co.uk
Telephone 020 7453 5082 Fax 020 7453 6097

1.2.2 US Air Force

When Carnicom wrote to the US Air force, via his congressman, an even more brazen response was received – they claimed the issue was all an "Internet Hoax" - this response was again inappropriate and does not address the facts.



Office of the Secretary

DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC

23 August 2000

The Honorable Mark Green
United States House of Representatives
Washington DC 20515

Dear Mr. Green

This responds to your inquiry concerning "chemtrails."

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

There has been an increase in the number of contrails observed due to the significant civil aviation growth in the past decade, and the patterns observed are directly correlated to the grid pattern formed by aircraft flying north/south and east/west routes designated by the Federal Aviation Administration (FAA). The FAA manages the National Airspace System (NAS) and controls both civilian and military aircraft using the NAS. The National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) are the agencies charged with conducting atmospheric and climate experiments and are investigating the effects of contrail formation and dissipation on the climate.

Aircraft and their engines can produce a variety of condensation patterns ("contrails"), exhaust plumes, and vapor trails. Furthermore, the Air Force performs missions during which, exhaust is released into the atmosphere. The exhaust emissions produced by aircraft and space launch vehicles can produce contrails that look very similar to clouds which can last for only a few seconds or as long as several hours. Vapor trails are formed only under certain atmospheric conditions and create a visible atmospheric wake similar to a boat propeller in water and usually dissipate very rapidly.

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

The contrails formed by the exhaust at high altitude are typically white and very similar to cirrus clouds. As the exhaust gases expand and mix with the atmosphere, the contrail diffuses and spreads. At sunsets, these contrails can be visibly eye-catching and striking as they reflect the blue, yellow, and red spectrum of the reflected sunlight. Due to horizontal wind shear and a minimum vertical wind component, contrails tend to become wider and remain thin. It is very difficult to distinguish aged contrails from cirrus clouds.

2. Analysis Of Phenomenon

2.1 History

The history of this secret programme is unclear, although instances of spraying the population with substances is not without precedent. For example, between 1953 and 1964 top secret trials were carried out using a chemical concoction of zinc cadmium sulphide to simulate how a cloud would disperse biological agents. The unsuspecting population was sprayed covertly with the poisonous compound at least 76 times. (http://www.bbc.co.uk/insideout/east/series10/week9_extra.shtml?subject=taxis)

A story in the UK Guardian (<http://politics.guardian.co.uk/news/story/0,9174,688098,00.html>) from April 2002, discusses a "60-pagereport [which] reveals new information about more than 100 covert experiments. The report reveals that military personnel were briefed to tell any 'inquisitive inquirer' the trials were part of research projects into weather and air pollution."

In the USA, one instance where spraying of "biologically inert" gases into the air was disclosed in Okalahoma city 2003, in what could be called a "bio-terror simulation experiment" (<http://ju2003.pnl.gov/pdfs/J-URBAN-Q&A-sheet6-10-03.pdf>). This experiment was conducted using a "combined budget from the U.S. Department of Energy, the U.S. Department of Homeland Security and the U.S. Department of Defense - Defense Threat Reduction Agency and other participating federal agencies" of \$6.5M.

Photographs of trails, like the ones shown in this document, date back roughly to 1997, although there may be photographs dating back to 1984.

2.1.1 Project Cloverleaf

There is some discussion that civilian airlines were involved in a secret project code named "Cloverleaf", which had been in operation for some time, but information about this is difficult to obtain. <http://www.carnicom.com/mgr1.htm> has some information allegedly supplied by an Airline official, but his identity remains secret, as do a number of details pertaining to the story.

About twenty employees in our office were briefed along with my by two officials from some government agency. They didn't tell us which one. They told us that the government was going to pay our airline, along with others, to release special chemicals from commercial aircraft. When asked what the chemicals were and why we were going to spray them, they told us that information was given on a need-to-know basis and we weren't cleared for it. They then went on to state that the chemicals were harmless, but the program was of such importance that it needed to be done at all costs. When we asked them why didn't they just rig military aircraft to spray these chemicals, they stated that there weren't enough military aircraft available to release chemicals on such a large basis as needs to be done. That's why Project Cloverleaf was initiated, to allow commercial airlines to assist in releasing these chemicals into the atmosphere.

2.2 General Observations – How is a CONTRAIL formed?

If one studies the Physics of the vapour trails of aircraft, the basics would seem to be fairly straightforward. In fact, the basics are something we often personally experience, at least in the United Kingdom, on every cold winter's day.

On such days, when we breathe out, we can see our breath. It's one of those signs that "winter is really here". What causes our breath to become visible? Very simply, it is that our breath is warm and the winter air is cold. Tiny droplets of water vapour condense out of the warm air to form "clouds of visible breath", before the warm air quickly cools and the "clouds" disappear again.

It is a very similar process that is happening about 30,000 feet in the air, when hot exhaust gases from jet engines heat the air. Water droplets condense out of the cooler surrounding air and form a

In dealing with uncertainty peer reviewed scientists and those working on publicly funded research need evidence. If they haven't got the evidence they shouldn't draw definitive conclusions. And with contrails there is currently scientific uncertainty, but that doesn't support any chemtrail conspiracy.

Section 7 para 3 your point 1

I would say that trails sometimes occur immediately, but not always. The text is saying that the emissions may not immediately cause a visible contrail but could have an impact on cirrus later, according to experiments. That doesn't sound unreasonable.

Section 7 Para 5

Once again contrails depend on atmospheric conditions, which vary from day to day.

Section 9

The climate impact of contrail cirrus is not known. It is different to saying sunlight levels have changed. Radiative forcing is the term for the very complicated way that each greenhouse gas has a different climatic effect and indicates the warming effect in watts per square meter. Some warm and some cool and the amount varies according to latitude. Some GHGs have an effect for many years.

Section 11

You appear to dispute the fact that contrails form. I believe the evidence and the science is quite clear; they do form and some persist. And I have previously explained how newer more efficient engines may initiate more contrails than older engines. The crosses and parallels are observed because of how aircraft are routed in corridors.

There is simply no evidence of unknown aerosols being covertly introduced and to claim otherwise is distorting the facts.

Yours sincerely,

Further Remarks

There is a considerably large volume of evidence which people are ignoring and thus they are drawing incorrect conclusions. I hope I have provided you with enough feedback on the Schumann report to demonstrate that something is seriously wrong and, as I said in my previous letter, deeper and uncompromised investigation is required by you and your agency.

Below, I include some messages that were sent to me from around the world following the posting of my report and press release.

I will be posting a follow-up press release, discussing the essence of your response and my answers that I have included here.

Thank you very much for reading this long response.

Yours Sincerely,

Andrew Johnson

Responses received by e-mail from Chemtrailing Dossier and Associated Press Release

{As shown above}

2.3 Carnicom's Analysis of Contrail Formation

<http://www.carnicom.com/model2.htm>

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

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.

This is the only paragraph where specific times for the duration of persistence is mentioned – all these times do not agree with the examples I have documented and provided to you. I am fully aware that ordinary contrails dissipate within 2 minutes.

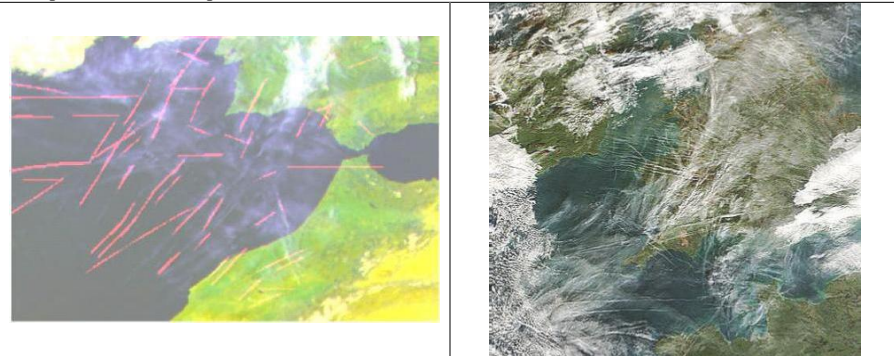
Section 5, Paragraph 2

At present, only a few exploratory studies have dealt with the later stage of the persistent contrail dynamics which depends on the mesoscale atmospheric flows with rising or sinking motions of turbulent or wavy character and on shear, radiation and ice particle sedimentation. A vertical shear in the wind perpendicular to the contrail causes a contrail spread which may reach several kilometres within hours [73-76].

Again, this is saying, “we don’t know why trails persist”.

Section 6, Figure 6

Compare with satellite photo from Feb 4th 2007.



Notice any differences? Right hand photo was from:

http://rapidfire.sci.gsfc.nasa.gov/subsets/?Europe_2_01/2007035/Europe_2_01.2007035.terra (4th Feb 2007)

Section 7 – Para 3

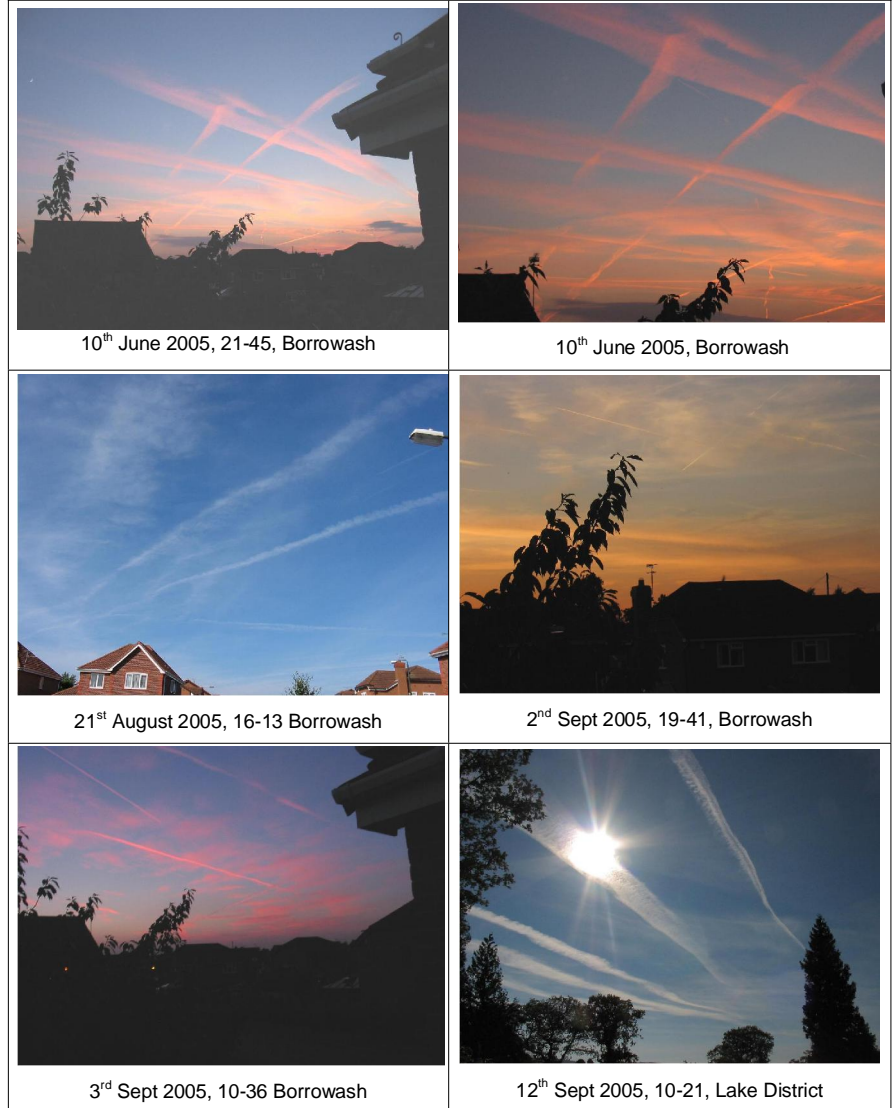
Consider the meaning of this paragraph:

A correlation between aviation soot and cirrus particle concentrations has been observed in cirrus only in one case study, apparently in young persistent contrails [91]. The potential for a connection between aerosols and cirrus has been found in experiments which have shown differences in aerosol and cirrus particle concentration in clean and polluted air masses [20: 92-95]. However, the contribution of aviation emissions to cirrus formation in the atmospheric aerosol has not yet been observed at ages beyond about one hour, nor has the formation of cirrus been documented which forms from aviation aerosol without presence of a contrail. The potential for an impact of aviation aerosol on cirrus has been shown in still tentative numerical simulations of soot concentrations and ice particle formation [96, 97].

Is this suggesting that the aircraft passes over, with no persistent contrail, then a cirrus cloud forms sometime later? If this is the case then:

3. A Selection of Data

3.1 Photographs



Detailed Response to the Schumann Report

Definition of Cirrus Clouds

There seems to be some confusion that contrails may be Cirrus Clouds, so I want to consider the definition of cirrus clouds. From: <http://www.allstar.fiu.edu/aero/fltenv3.htm>

Cirrus (Ci). Very high, Thin, wavy sprays of white cloud, made up of slender, delicate curling wisps or fibers. Sometimes takes the form of feathers or ribbons, or delicate fibrous bands. Often called cats' whiskers or meres' tails.(left)

Cirrocumulus (Cc). Thin clouds, cotton or flake-like. Often called mackerel sky. Gives little indication of future weather conditions.(right)

Cirrostratus (Cs). Very thin high sheet cloud through which the sun or moon is visible, producing a halo effect. Cirrostratus is frequently an indication of an approaching warm front or occlusion and therefore of deteriorating weather. (left)*

Also from: http://www.crh.noaa.gov/lmk/soo/docu/cloud_classifications.php

Cirrus clouds are wispy, feathery, and composed entirely of ice crystals. They often are the first sign of an approaching warm front or upper-level jet streak. Unlike cirrus, cirrostratus clouds form more of a widespread, veil-like layer (similar to what stratus clouds do in low levels). When sunlight or moonlight passes through the hexagonal-shaped ice crystals of cirrostratus clouds, the light is dispersed or refracted (similar to light passing through a prism) in such a way that a familiar ring or halo may form. As a warm front approaches, cirrus clouds tend to thicken into cirrostratus, which may, in turn, thicken and lower into altostratus, stratus, and even nimbostratus.

Looking at the chemtrails, these do not match these descriptions much at all – because they are not water vapour based cloud formations.

I will now go through some sections of the paper “*FORMATION, PROPERTIES AND CLIMATIC EFFECTS OF CONTRAILS (Schumann, 2005)*” and offer a commentary on what each one says.

Section 7, Page 12

The formation of contrail-cirrus is clearly visible to ground observers and observations by satellites from space [77-79]. However, modelling and prediction of contrail cirrus for observable cases is still in its beginning [88]. Proper models and validation data for such studies, including the state of the atmosphere, at scales comparable to the size if supersaturated regions are still to be provided. No conclusive observational evidence exists for an impact of aviation aerosol on cirrus properties.

So, there is no evidence that contrails affect the formation of cirrus clouds.

It is to be expected that aviation aerosol and aerosol precursor emissions may impact the upper tropospheric aerosol over their entire life cycle, which may last over a time scale of up to a few weeks depending on season and altitude.

We see almost immediate effects of contrails/chemtrails – as documented on 4th Feb 2007, for example.



23rd Jan 2007, 15-52 Yorkshire/Humberside



29th Oct 2006, 17-09 Borrowash



Morecambe, May 2007 (Cell phone Camera)



Bognor Regis, May 07, 2007, 18-04

3.2 Video

Please view the enclosed DVD and also there are many online videos, some including Time Lapse photography, for example. This video by Phil Morris in Cheshire shows a plane with a contrail passing over a persistent trail:

<http://www.youtube.com/watch?v=i3fSaWFdt9E>

Phil Morris has a selection of videos posted here:

<http://www.youtube.com/profile?user=skywatch>

This video (also included on the DVD) again shows a comparison between contrails and Chemtrails, this time with time-lapse:

<http://www.checktheevidence.com/ContrailsVsChemtrails.wmv>

5. Other Information

5.1 Websites

The chemtrailing issue is all but hidden from public discussion and discourse, with only a small amount of media coverage in the USA (for example, a 5 minute story on NBC4 News LA - 16th May 2006). We are therefore left to consult websites, such as the ones listed below, for reasoned analyses and information about the subject.

- <http://www.carnicom.com/>
- <http://www.projectprove.com/Arts/Chmndx/chmndx.php>
- <http://www.weatherwars.info/>

5.2 Newspaper coverage (UK)

This section includes 2 instances of UK coverage in the local media.

5.2.1 Northwich Chronicle - (Phil Morris)

Man on the trail of skyscape mystery Aug 31 2005

By Anthony Harvison, Northwich Chronicle

(http://iccheshireonline.icnetwork.co.uk/printable_version.cfm?objectid=15914499&siteid=50020)

ARE the skies being illicitly contaminated with a mysterious substance that may have serious effects on people's health?

One Cuddington man thinks so and is on a mission to find the truth.

Phil Morris, 50, is gravely concerned with what he perceives to be happening to the atmosphere in the North West and across the world.

The phenomena he refers to are known as 'chemtrails' - long-lasting, thick, white, expanding trails left by non-commercial planes, that eventually merge and blanket the skies.

'Ask yourself this,' he said, 'when did you last see clear blue skies over Lancashire and Cheshire with no clouds anywhere - without the pure natural skyscape being polluted by these trails and haze?'

Phil first noticed the phenomena, contrasted with contrails (condensation trails) which are normal water vapour trails left by commercial airliners that usually disappear within a minute, three-and-a-half years ago.

He started videotaping them and has amassed a significant collection of images to support his arguments.

He continued: 'The planes I have video-taped leave large crosses, grids, A and H shapes in the sky that spread out slowly over hours to create fake chemical clouds.'

'They fall and thicken quickly leaving the telltale doughnut on a rope shape, they are pure white in daylight, and pale pink as the sun sets, while every other natural cloud had varying shades of white, grey and black plus colours as the sun sets.

'They also drift at around only 5%-10% the speed of normal clouds, often in the opposite direction to all the other clouds.

'When the sky is full of haze left by trails it can get extremely humid, even when there is no visible sun, and air feels stale.'

'I counted up to 50 planes last summer in one morning from sunrise to noon, and this happened on many occasions.'

traffic purposes which explains why contrails follow a similar path. Clearly changes that have occurred to these corridors will result in changes to contrails numbers and positioning.

You comment in paragraph 6.1.1 that the mass of water vapour emitted by an aircraft is so tiny that it wouldn't be visible. The vast majority of the mass of ice and vapour that is visible comes from the ambient air, as opposed to the aircraft. The disturbance and pressure changes around the aircraft and exhaust initiate the formation of the droplets, which then freeze. With air temperatures of -50C and colder they can persist for longer hours.

The following is a link to a good paper on the real science of contrail formation and summarises the specialist work of many eminent scientists.

http://www.aero-net.org/lib/Schumann/Schumann_Contrails_COMPTES%20RENDUS%20PHYSIQUE.pdf

This highlights improving engine efficiency as being one of the drivers of increased contrail formation. Page 4 suggests that the thermodynamic efficiency of engines was about 0.2 in 50s, 0.3 for the subsonic fleet in 92 and maybe 0.5 for new engines in 2010. This is good news for fuel efficiency but this report suggests that it is contributing to increased contrail numbers and persistence.

I understand that this might not support the position you hold, but believe that the evidence base offers reassurance about the source and content of these trails.

Yours sincerely,



James M.

Hi Andrew,

I have just been looking over your chemtrail dossier and I think think it is an excellent peice of work.

Chemtrails first caught my attention after reading an article in nexus magazine around about 1998/99, and to be honest at that time in the UK I was not seeing any, so I just dismissed the idea as something that was happening in the US, if indeed it was happening at all, but still I decided to keep my eyes open just in case.

But then back in 2002 I was leaving my nephews house in North Shields Tyne & Wear to come home to Kelso just over the Scottish border.

From the main road near the tyne tunnel you can just see the cheviot hills that mark the border with Scotland and England, and amongst those hills is Otterburn military training camp.

Now back then and reaching the rise on the main road I could see in the distance the cheviot hills, except this time I could make out a huge X in the sky, so all the way home I kept my eye on this X to try to discover it's exact location and upon reaching wooler I could see that the X was amost above my head but to the left and which would have been directly over otterburn training camp and ever since that day these trails have been persistent over and near my home which is only about 20 miles from the training camp.

Now if you note, I first noticed this at the end of the summer in 2002 just as the case for the war in Iraq was being ramped up, any connection?

I have since taken many photos and videos of this phenomenon and also believe that last years spate of noctilucent clouds here in the UK may also be connected.

Keep up the good work Andrew.

Your's sincerely,

John C

Dear Mr. Johnson:

I am interested in your report and would like to communicate with you about some of the information that two of us have been researching since 1998. We believe, however, that the program here in Northern California and Arizona dates back to 1988 or 1989, when the American taxpayer funding was made available for a wide variety of programs...which include the making of persistent jet contrails. We believe that there may have been experiments prior to this date...however, technology and funding became available on a massive scale in the late 1980s.

If you would like to communicate with me this would be great. I do intend to forward your site on the Internet here and in several places in the next couple of days. I have a variety of government documents which might be of interest to you as well.

Your report is very good.

Sincerely,

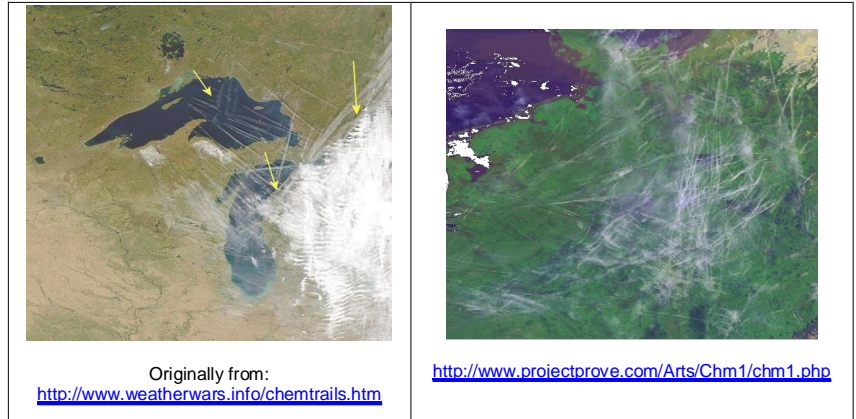
Rosalind, California

6. Conclusions

6.1 Reasons Why this is NOT a Contrail Phenomenon

6.1.1 Visibility of Trails on Satellite Photos

The mass of water vapour contained in a standard Contrail would be tiny, and certainly not observable from 150 miles up in space, and yet as Jeff Challender observes, we can see the trails on many satellite photographs, such as these additional ones shown below



6.1.2 Time of Trail Persistence

Vapour trails from aircraft should NEVER persist for more than about 2 minutes – even in ideal conditions. This can easily and clearly be demonstrated from the time lapse footage included on the DVD. A chemtrail does not even behave like a cloud formation – it does not “billow” – it forms, spreads out and then “fades away”.

6.1.3 Irregular Pattern of Appearance

The frequency of appearance of trails does not bear any noticeable relationship to levels of civilian air traffic.

6.1.4 Height of Appearance of Trails

With repeated observation, some chemtrails can be seen at much lower altitudes than any *persistent* contrails should ever appear at – this can be observed from the apparent size of the plane in the sky. For example, contrails are normally seen to form when planes are so high in the sky that it is difficult to make out the colour or any salient features the aircraft may have. I have observed *persistent* trails from aircraft perhaps as low as an estimated 15,000 feet, but I have been unable to photograph them at such times.

6.1.5 Number of Trails Seen simultaneously at a Given Time

As demonstrated in the Case Study (see enclosed DVD), it is not possible to have such a high level of civilian or, for that matter, military air traffic (even during an exercise) which would generate the observed number of trails (42 planes flying over a small area in 2½ hours).

[This response was kind of “harsh”, but was written as a reaction to the flat denial of the evidence and because they did not follow my request to NOT send a response like this.]

Dear _____

Thank you for your response which I received some time ago. I was somewhat surprised to receive it – for the following reason. In my report, I stated I was not interested in receiving a reply which was a flat denial of the evidence presented. The letter which was signed by you (but you may not have written it) represented a denial of the data presented in my report. I stated in the report this was unacceptable and such a response should not be sent to me. This, then, is a waste of time and money and will be noted as such.

However, seeing as you did respond, I must point out that history has now recorded your name as being someone who supports a denial of basic evidence. This evidence was put together in a careful and reasoned manner. Your response did not offer any specific counter arguments of science or analysis to those that were presented to you. I need not point out that this goes against the way in which an organisation like DEFRA should operate – it should operate based on the principles of scientific truth.

Now, if I had submitted a basic letter with a few comments, your response might be considered adequate (from a certain, limited, point of view). However, I submitted an 18-page (approx.) report, backed by over 20 signatories, along with a DVD containing additional video evidence, so this is something more significant. I can also tell you that I received a number of messages of support following the publication of my press release and report - many people are now waking up to this issue. This means that your agency is going to have to deal with this issue at some point in the future.

Your denial of evidence and the implied support of illegal black operations is now noted and recorded for future generations to look back on. You can, of course, at any point, revisit what I presented – I have included a draft copy here for you, in case you personally didn't see it – and you can consider what the evidence means for us both - and what some group of people seem to be doing to the air that we breath. You can send me your personal response as to why you think the report is wrong, if you like – what specific elements of data do you disagree with? Or, you can walk down the street and look up at the aircraft that seem to be involved in re-engineering the atmosphere for some undisclosed purpose - and then wonder how so many other people (like you) can possibly be ignoring the issue. Yes, it's probably due to fear. So the way to overcome that fear is to seek knowledge and seek the truth – in doing so, we may find a way to mitigate the effects of what this secret project is trying to achieve. For now though, I would like you to pass on this message to your line manager and for them to pass it on up the ranks: “*We know*” and “*We're watching you.*”

I urge you to carefully review this data – in a personal if not professional capacity. I am not just a “customer”, I am a *person* - someone who knows when official agencies are denying evidence to protect another person or group. I know when someone has been told to put out an “official response” because the issue is too big or too sensitive to present an honest response.

On the next page, I include some of the messages I have received in response to the publication of my report and press release.

Yours Sincerely,

Andrew Johnson

{Enclosed another copy of original Report}

7. Action Required

As mentioned in Section 6.4:

We hereby call for this matter to be the subject of serious, honest and dispassionate investigation without recourse to denial of evidence, ridicule, stonewalling or any combination of these things. It demands a most vigorous application of energy and time to uncover the purpose and intended outcome of this secret project.

Signatories		
Andrew Johnson, BSc 22 Mear Drive Borrowash Derbyshire DE72 3QW Tel: 01332 674271 e-mail: ad.johnson@ntlworld.com	Paul Wright 24 James Street Allerton Bradford BD15 7RB Tel: 07901782271 e-mail: wy911@goowy.com	Frank Da Silva 30 St. Lukes Road 2nd Floor London W11 1DJ Tel: 020 7229 7943 e-mail: crystaleagle@gmail.com
Brian Coleman 326 Holloway Road Flat 1 Holloway London N7 6NJ Tel: 0207 619 9988 e-mail: zen49611@zen.co.uk	Dave Gold 53 Newland Gardens Hertford Herts SG13 7WN Tel: 07734130597 e-mail: Complexfish@hotmail.com	Albert Shine, 24 Clarence Street, Morecambe Lancs, LA4 5EX, Tel: 01524 831340 e-mail: albertshine@tiscali.co.uk
David Griffin, MSc. 23, Noel St Nottingham NG7 6AQ e-mail: davidgriffin23@gmail.com	Nick Buchanan, BA, Cert. Ed. 3 Wilne Road Wallasey CH45 5HW Tel: 0151 630 4217 e-mail: n.buchanan@hotmail.co.uk	Adrian Connock Bristol Tel: 07971 836689 e-mail: aconnock@gmail.com
Penny Pullen High Meadows, 91 Kirkhead Road Grange Over Sands Cumbria LA11 7DD Tel: 015395 33880 e-mail: peacepals@tesco.net	Anthony Beckett, MSc 6 Halsteads Way Steeton Keighley West Yorks BD20 6SN Tel: 07733 323841 e-mail: anthony.m.beckett@googlemail.com	Belinda M. McKenzie, MA 83 Priory Gardens Highgate London N6 5QU Tel: 020 8340 6779 e-mail: b.mckenzie@btinternet.com
Gil Williamson 12 Park Street Masham North Yorks HG4 4HN Tel: 01765 689 237 e-mail: gwilliamson@lineone.net	R. Westley 6 Penistone Walk Harold Hill Romford Essex RM3 8YB e-mail: reetwestley@btinternet.com	Daniel T. Bratland 61031 Fox Hills Drive Bend, OR 97702, USA Tel: +1541.610.4261 e-mail: tom.bratland@gmail.com
Lawrence Wright 1 Bowens Field Wem SHREWSBURY Shropshire SY4 5AR	Patrick Rattigan, N.D., Cert. Ed. 1 Quarry Bank Rd Chesterfield Derbs S41 0HH e-mail :	David Sherlock Touchwood London Road Swanley Kent BR8 7HA