# Chemtrails: the proof and the purpose

#### T. J. Coles

In 1996 people across the US, UK, Canada, and Australia, began noticing unmarked aeroplanes operating over their towns. The aeroplanes laid long, thick, persistent trails across the sky. These came to be known as chemtrails (chemical trails). As the operations intensified, NASA, aviation authorities, and military organisations responded to queries made by concerned citizens that the trails in question were merely condensation trails (contrails) generated by jets, which, they claimed, have always persisted and expanded in all temperatures, humidity levels, and altitudes. In reality, this is not the case and the aforementioned authorities do not address the fact that the aeroplanes in question are unmarked and occasionally military planes.

Those who enter the contrail vs. chemtrail debate have already lost, as military-linked scientists (such as media favourite Patrick Minnis) <sup>1</sup> can invent any atmospheric science theory to explain away persistent condensation. Indeed, the overwhelming majority of academic publications on so-called 'persistent contrails' were published from 1996 onwards, with an intensification of interest in the subject during the 1998-

On Minnis see <www-pm.larc.nasa.gov/pages/minnis\_home.html> For a small sample of the vast literature on so-called 'persistent contrails' which either relies on Patrick Minnis as a primary source or is NASA-associated research, see: Kenneth Sassen, 'Contrail-Cirrus and Their Potential for Regional Climate Change', Bulletin of the American Meteorological Society, Vol. 78, No. 9, September 1997; F. Stordal, G. Myhre1, W. Arlander, T. Svendby, E. J. G. Stordal, W. B. Rossow, and D. S. Lee, 'Is there a trend in cirrus cloud cover due to aircrafttraffic?', Atmospheric Chemistry and Physics Discussions, No. 4, 6473-6501, 2004; R. Paoli, J. Helie, T. J. Poinsot, and S. Ghosal, 'Contrail formation in aircraft wakes using large-eddy simulations', Center for Turbulence Research Proceedings of the Summer Program, 2002; A. Carleton, D.J. Travis, K. Master, S. Vezhapparambu, 'Composite Atmospheric Environments of Jet Contrail Outbreaks for the United States', American Meteorological Society, Vol. 47, May, 2008; S. Dietmuller, M. Ponater, R. Sausen, K-P. Hoinka, and S. Pechtl, 'Contrails, Natural Clouds, and Diurnal Temperature Range', American Meteorological Society, Vol. 21, October 2008.

2002 period. If 'persistent contrails' have existed since commercial aviation began, why did significant academic interest begin in 1996, the year in which the US Air Force announced it would 'own the weather' via 'injection of chemical vapors' into the atmosphere? (Discussed below.)

The first question a critical observer needs to ask is, 'Why are unmarked planes operating over my town?' The next question to ask is, 'Why are the jets deviating from commercial flight-paths, violating commercial spacing laws, and performing manoeuvres impossible for commercial jets (crossing, making 'u-turns', performing near-vertical trajectories, etc.)?' The final question to ask is, 'Why are the non-commercial, unmarked planes making long, thick, persistent, expanding trails, but the marked, commercial planes are not?'

The chemtrail operations are well documented by the US military and suggest that chemtrails are part of the Pentagon's quest to achieve Full Spectrum Dominance by the year 2020. Because the ionosphere affects both, it has been understood for decades that weather modification and radio communications dominance are two sides of the same coin. By releasing vast amounts of piezoelectric substances [materials that generate electrical voltage in response to applied mechanical stress] into the upper atmosphere, the magnetic field lines of the Earth can be, and are being, influenced with the purpose of covert, geophysical war-fighting.

# Weather modification and ionospheric warfare

In 1996 the US Air Force 2025 think tank announced that by the eponymous year, the United States will 'own the weather' by injecting 'chemical vapors' into the atmosphere. <sup>2</sup> A timetable of current–to future capabilities is provided in the document, including 'Chemicals' and 'Delivery vehicles'. The programme is actually operational, and is referred to in other, unclassified US Air Force papers discussed below.

2 Col. Tamzy J. House, Lt. Col. James B. Near, Jr., LTC William B. Shields, Maj. Ronald J. Celentano, Maj. David M. Husband, Maj. Ann E. Mercer, Maj. James E. Pugh, 'Weather as a Force Multiplier: Owning the Weather in 2025', Air Force 2025, August 1996, <a href="http://csat.au.af.mil/2025/volume3/vol3ch15.pdf">http://csat.au.af.mil/2025/volume3/vol3ch15.pdf</a>

Furthermore, the 'owning the weather' document not only proves the existence of chemtrails, but mentions their use in then current weather modification operations.

The Air Force 2025 stated that by that year, the weather will be weaponised by numerous methods, 'including injection of *chemical vapors* and heating or charging via electromagnetic radiation or particle beams (such as ions, neutral particles, x-rays, MeV particles, and energetic electrons)'. On the confirmation of chemicals and current deployments, the paper states: 'If clouds were seeded (*using chemical nuclei similar to those used today* or perhaps a more effective agent discovered through continued research) before their downwind arrival to a desired location, the result could be a suppression of precipitation' (emphasis added). <sup>3</sup>

Further evidence of the existence of chemtrails can be found in a document published by the Air Force Phillips Laboratory and the Air Force Materiel Command (which has no disclaimer about 'fictional scenarios') which stated:

'Measurements of effluent plumes and chemical clouds by ground-based and airborne Lidar [Light detection and ranging] will continue through FY99'. <sup>4</sup>

1999 was the year in which Sonoma State University's Project Censored named chemtrails one of the most underreported stories of the year. <sup>5</sup>

According to US Air Force Colonel William Scott Bell, writing in 2008, 'Today, NASA and several other organizations use space-based LIDAR to analyze cloud formations and atmospheric aerosols'. (empasis added) <sup>6</sup> Given that Patrick Minnis works for NASA, specifically the Langley Institute which uses satellites to monitor (what it claims are condensation)

<sup>3</sup> See note 5.

<sup>4</sup> Air Force Materiel Command and Air Force Phillips Laboratory, `FY97 Geophysics Technology Area Plan', 1 May 1996, Ohio: Wright-Patterson Air Force Base.

<sup>5</sup> William Thomas, 'Chemtrails in the Sky and the New Microbes', *Consumer Health*, Vol. 23, issue 7, July, 2000, <www.consumerhealth.org/articles/display.cfm?ID=20000830164825>.

<sup>6</sup> William Scott Bell (Maj.), 'Commercial Eyes in Space', Center for Strategy and Technology, Air War College, March, 2008, p. 7.

trails, <sup>7</sup> it is clear why Minnis is the media's favoured spokesman.

The Air Force Phillips-Materiel Command document added that the Air Force's aims were to 'Develop accurate and validated cloud and weather simulation for any world-wide location to support acquisition, training and war-gaming', 8 which explains why chemtrails have been observed all over the world. The four main countries in which chemtrails first appeared – US, UK, Canada, and Australia – have a history of working together on classified weather modification and biochemical warfare trial projects, according to the World Meteorological Organization 9 and the UK Ministry of Defence. 10 After 1999, however, people in other countries, including European and North African states, began to notice the chemtrails.

US Congressman Dennis Kucinich's Space Preservation Act (2001) listed 'chemtrails' as 'an exotic weapons system'. <sup>11</sup> Few chemtrail debunkers cite Kucinich's bill. The Wikipedia entry on chemtrails does mention the Kucinich bill, but attempts to discredit the bill by inferring that the bill was subjected to ridicule in Congress before being quashed, and that it refers to 'extraterrestrial' and 'tectonic' weapons, so by definition it must be frivolous. <sup>12</sup> In reality, 'extraterrestrial' means weapons placed in the space medium (not 'alien' technology), and the existence of tectonic weapons was

<sup>7</sup> NASA Langely Institute, 'Contrails Wepage (Contrails not Chemtrail [sic])', no date, <www-pm.larc.nasa.gov/newcontrail.html>.
8 See note 4.

<sup>9</sup> Anthony Morrison, Steven Siems, Michael Manton, Alex Nazarov, John Denholm, Roger Stone, 'An overview of current cloud seeding research in Australia and an analysis of the Tasmanian cloud seeding operations from 1964 to 2005' in World Meteorological Organization and World Weather Research Programme, Ninth WMO Scientific Conference on Weather Modification (Antalya, Turkey, 22-24 October 2007), WMP No. 44, Geneva: United Nations, <www.wmo.int/pages/prog/arep/wmp/documents/CD\_WMP\_44.pdf>

<sup>10</sup> Defence Science and Technology Laboratory (Ministry of Defence (UK)), Annual Report and Accounts 2009/10, London: MoD.

<sup>11</sup> Dennis Kucinich, 'The Space Preservation Act (2001)', United States Library of Congress, HR 2977 IH, 1st Session, 2 October, 2001, <www.fas.org/sgp/congress/2001/hr2977.html>.

<sup>12</sup> See Wikipedia 'Chemtrail conspiracy theory', no date.

confirmed in 1997 by then US Defense Secretary Bill Cohen, who admitted that he and his Pentagon cronies were 'intensify[ing] our efforts' to 'set off volcanoes, tsunamis using electromagnetic waves', <sup>13</sup> echoing the work of President Johnson's science advisor, Gordon MacDonald, in the late-1960s on earthquake weapons. <sup>14</sup>

Further evidence of the existence of not only chemtrails but the operational validity of the 'owning the weather' programme can be found in a US Air Force paper, circa 1999:

'The joint Army/AF [Air Force] OTW [Owning the Weather] initiative will provide knowledge of current and forecast battlefield environment conditions, along with their effects on systems, soldiers, operations, and tactics, to contribute to the Army's decisive advantage over its opponents. Within the DOD [Department of Defense], BE [the Battlefield Environment division] is the lead agency for multi-service R&D programs in transport and dispersion modelling..... [T]he Dugway Meteorology and Obscurants Division's Modeling and Assessment Branch provides.....prototype development of virtual proving ground meteorological support. Division members also serve on various national and international committees addressing issues related to meteorological 15 measurements and atmospheric dispersion modeling'.

This paper has not been cited by those seeking to debunk the 'chemtrail conspiracy'. Aerosol obscuration is achieved by the creation of artificial cirrus clouds which originate as 'contrails' emitted from specialised aircraft. These operations have their

<sup>13</sup> William Cohen, 'Cohen address 4/28 at Conference on Terrorism: Weapons of Mass Destruction, and U.S. Strategy', University of Georgia, 28 April 1997, <www.fas.org/news/usa/1997/04/bmd970429d.htm>.

<sup>14</sup> Gordon J.F. MacDonald, 'How To Wreck the Environment', in Nigel Calder (ed.), *Unless Peace Comes*, (London: Penguin,1968,) pp. 177-8.
15 United States Air Force, 'Department of Defense Weather Programmes', no date, circa 1999, Section 3, <www.ofcm.gov/fedplan/fp-fy01/pdf/sec3b dod.pdf>

origins in the US Air Force's 1940s' Project Cirrus. <sup>16</sup> Shortly after it was recognised that the energy in the ionosphere could be harnessed for electromagnetic warfare. US Navy documents from the 1960s discuss injecting energy into the ionosphere in order to release more power. The Advanced Research Projects Agency began a project, titled 'Some Upper Atmosphere Aspects of Chemical Geophysical Warfare'. <sup>17</sup> Around that time, the US military began experimenting with atmospheric barium releases.

Barium is a piezoelectric substance: i.e. it generates an electric field or electric potential in response to applied mechancial and electromagnetic stress; e.g. the stress of the Earth's electromagnetic fields. A paper published in the *Journal of Atmospheric and Terrestrial Physics*, archived by the military, noted 'The use of high altitude releases of barium vapor for the production of visible plasma clouds'. <sup>18</sup> The global releases of barium as a means of altering the Earth's magnetic field lines for the purpose of energy transfer found its way into the patents of Bernard Eastlund, <sup>19</sup> an 'inventor' credited with designing the early phases of the High-Frequency Active Auroral Research Programme (HAARP). <sup>20</sup>

Based in Alaska, HAARP is a 180-antenna array which modifies the ionosphere for experimental purposes. It has been condemned by the European Parliament for its potential

<sup>16</sup> Arnold A. Barnes, 'Weather Modification: Test Technology Symposium '97: Session B: Advanced Weapons/Instrumentation Technologies', Air Force Materiel Command, 19 March 1997, <www.docstoc.com/docs/70885157/Weather-Modification>. 17 See note 20.

<sup>18</sup> G.T. Best and H.S. Hoffan, 'The initial behavior of high altitude barium releases - I. The particulate ring', *Journal of Atmospheric and Terrestrial Physics*, Vol. 36, issue 9, 1974.

<sup>19</sup> Bernard J. Eastlund, 'United States Patent 4,686,605', United States Patent Office, 11 August, 1987,<a href="http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=4,686,605.PN.&OS=PN/4,686,605&RS=PN/4,686,605>.

<sup>20</sup> Nick Begich and Jeanne Manning, *Angels Don't Play This HAARP*, (Anchorage: Earthpulse Press, 2007) (seventh edition)

'manipulation of global weather patterns'. <sup>21</sup> More than this, however, the HAARP can act as one of a dozen or so ground-based lasers that charge the barium particles present in chemtrails. <sup>22</sup>

An Air Force Phillips-Materiel Command symposium held in 1997 listed 'Cloud modification – surveillance/coverage/ Hole Boring/Create/suppress Cirrus/contrails/Ionospheric modification' on the same page. Why would the document list 'contrails' unless it referred to a modified form of contrail (i.e. an aerosol/chemtrail) which, the document acknowledged, the Air Force can 'Create/suppress' in relation to 'Cirrus' clouds and 'Ionospheric modification'? <sup>23</sup> This fits the cited 1996 plan, which admitted that the Air Force analyses 'chemical clouds' (quoted above). Most of the chemtrails documented by global citizens expand into cirrus clouds. There is also a picture of HAARP in the symposium slideshow. A SPACECAST 2020 paper published around 1994 explained:

'This technology will involve temporarily modifying the ionosphere through insertion of gaseous compounds......at certain altitudes and locations to increase the neutral and electron density.....This effect, however, can also be enhanced by shooting a high energy laser, microwave, or particle beam (wavelength will be dependent on gaseous compounds used) into the chemical insertion region to accelerate the photoionization and dissociative recombination processes. End result from the chemical insertion will be increased electron density having a jamming effect on the enemy's radio wave propagation capability due to absorption of the wave energy by the charged particles in the enhanced ionosphere. The downside is that your

<sup>21</sup> Maj Britt Theorin (Rapporteur), 'Report on the environment, security and foreign policy', Committee on Foreign Affairs, Security and Defence Policy, European Parliament, 14 January, 1999, A4-0005/99, DOC\_EN\RR\370\370003 PE 227.710/fin, <www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A4-1999-0005+0+DOC+XML+V0//EN>

<sup>22</sup> See note 20 above.

<sup>23</sup> See note 16 above.

own communications can be affected as well.' 24

The last sentence is no longer applicable due to HAARP, which communicates within Ultra-, Very-, and Extremely-low frequencies. The Air Force Materiel-Phillips Lab document also mentions the dispersal of 'chemical clouds' in relation to HAARP: 'Chemical and other techniques to mitigate deleterious ionization effects on GPS transmission will be tested and evaluated in FY97-99', <sup>25</sup> again, the years in which chemtrails were seen to be intensifying.

The 'owning the weather' paper, which, as noted, at least two other Air Force publications acknowledge to be authentic and operational, notes that operations range

'From enhancing friendly operations or disrupting those of the enemy via small-scale tailoring of natural weather patterns to complete dominance of global communications and counterspace control.' <sup>26</sup>

Likewise, the UK MoD in a thirty-year projection stated that 'Weather modification will continue to be explored' and the effects might be to 'disrupt lines of communication'. <sup>27</sup>

Because civilian infrastructure is dependent upon space for telecommunications, the internet, banking, GPS, weather and climate prediction and analysis, etc., the goal of the Pentagon is to 'dominat[e] the space dimension' in order to 'protect' 'dual-use', civilian-military hardware and software from counter-space attacks, solar flares (space weather), and other damaging effects. By covering the troposphere in a blanket of artificial clouds, the Pentagon can disrupt Russian, Chinese, and other military and civilian communications, while maintaining its own and 'protecting' those of its allies. This will lead to Full Spectrum Dominance, as the Pentagon explains:

'Information superiority relies heavily upon space

<sup>24</sup> SPACECAST 2020, 'Space weather support for communications', no date, circa 1994, <www.fas.org/spp/military/docops/usaf/2020/app-a.htm>

<sup>29</sup> See note 4 above.

<sup>26</sup> See note 2 above.

<sup>27</sup> Ministry of Defence, 'Strategic Trends Programme: Out to 2040', 4 February, 2010 (fourth edition), London: MoD, p. 156.

capabilities to collect, process, and disseminate an uninterrupted flow of information while denying an adversary's ability to fully leverage the same.... [T]he military must preserve certain core space capabilities, e.g., missile warning, assured space communications, and large portions of ISR [intelligence, surveillance, reconnaissance]. Other space capabilities, once the domain of the military, can reasonably migrate to the civil and commercial sectors, e.g., weather, GPS, and multispectral imagery.' <sup>28</sup>

#### **Biochemical nanotech**

Aside from modifying the ionosphere for the purposes of 'info dominance', weather weaponisation, and geophysical warfare, chemtrails also play a part in biochemical warfare analysis, trials, and possibly binary nanotech. according to the journal of *Science and Engineering Ethics*,

'Passive observation of people could.....be complemented by actively manipulating them – for instance, if it would be possible to gain direct technical access to their nervous system or brain.....

Nanoparticles could eventually be transported as aerosols over great distances and be distributed diffusely. They could enter the human body by way of the lungs, through the skin, or the digestive tract'.

As noted, NASA's Langley Institute has been assigned to analyse the cloud formations and track the biochemical agents using infrared and ultraviolet LIDAR. In 2001, a PowerPoint presentation was given to delegates from the US Air Force 2025 (the 'owning the weather' team), DARPA, CIA, FBI, et al., attending a NASA Langley Institute meeting. Relative to chemtrails, the presentation included as the 'Major Influences

<sup>28</sup> US Space Command, 'Vision for 2020', February, 1997, <www.gsinstitute.org/gsi/docs/vision\_2020.pdf>
29 Armin Grunwald, 'Nanotechnology – A New Field of Ethical Inquiry?', Science and Engineering Ethics, No. 11, 2005, pp. 187-201, <a href="https://springerlink3.metapress.com/content/b772917655x56804/resource-secured/?target=fulltext.pdf&sid=g5c2ompw0rtbl43bxu4dnn1l&sh=www.springerlink.com">https://springerlink.com</a>>.

### of IT/Bio/Nano Upon Future Warfare':

'Ubiquitous miniaturized/networked multi-physics, hyperspectral sensors......Wonderous [sic: wandering?] /Ubiquitous land/sea/air/space multiphysics, hyperspectral sensor swarms (military/commercial/scientific)..... Robotic/swarm technologies primarily commercial/endemic worldwide....."Volumetric" weaponry.....fuel/air dust/air....Isomers [nuclei, which the Owning the Weather document confirmed are needed for cloud creation]......Carbon fibres.'

(The Owning the Weather document also mentioned the use of carbon black nano-dust.)

The presentation also included a discussion on:

'Airborne varieties of Ebola, Lassa, etc.....Aflatoxin ("natural," parts-per-billion carcinogen[)].... Binary bio into nation's agric./food distrib. system (every home/foxhole).....Genomicaly (individual/society) targeted pathogens.....Ubiquitous/Cheap micro-to-nano EVERYTHING......precision strike, volumetric warfare, "swarms".......Binary bio (anti-functional/fauna)..... Inexp. Binary Bio into Food Supply.' (Emphasis in original). 30

The report listed 'Vulnerabilities: Visual, lidar, IR [infrared], bio-lum [bio-luminescent?], turbidity.' Why would 'turbidity', which means thickness and density, particularly in relation to atmospheric processes, be discussed unless it referred to purposefully created, wind-blown aerosols? The biochemical agents being released via chemtrails are therefore not only designed to monitor the health of targeted populations exposed to the pathogens, but also to test the efficacy of the LIDAR systems in preparation for 'volumetric' attacks on other countries. As the presentation clarified, this is an operation 'endemic worldwide'.'

In 2007, the UK Ministry of Defence confirmed that

'Certain sensitive applications, such as decisive or

<sup>30</sup> Dennis M. Bushnell, 'Future Strategic Issues/Future Warfare [Circa 2025]', NASA Langley Research Center, undated circa 2001, archived by the Federation of American Scientists, at <www.fas.org/man/eprint/FutureWarfare.ppt>.

revolutionary systems and weapons, especially those associated with deterrence and mass effect, will increasingly be developed in discreet (and discrete) partnerships. Specific national or closely allied expertise and investment will be required to address, for example nuclear, counter-terrorism and chemical and biological defence.' 31

The 'defence' tag-on can be discounted because the 1940-79 biochemical-nuclear trials on the British public were also labelled 'defensive'. <sup>32</sup>

In this MOD document we find the following:

'In these cases, the supplier is *likely* to remain inhouse to Defence, or government-to-government. Direct investment *will* also remain important where there is no civilian counterpart, such as high-performance explosives, certain protection and guidance systems, and specific sensors......Military and civilian applications that require range and visibility, particularly sensing applications, are currently moving *from ground to airborne* use and, as they become practically and economically viable, many of these applications *will* be increasingly exploited either in the *high atmosphere* or in space.' (Emphases in bold in original, other emphases added.) <sup>33</sup>

The reference to the 'high atmosphere' is key because that is where the chemtrails are being sprayed, according to the 'owning the weather' document, in relation to ionospheric weaponisation. Aside from 'owning the weather', the chemtrails being sprayed today are a continuation of this type of research. The US Air Force explained:

'the Boundary Layer Meteorology and Aerosol Research Branch conducts a research program in the

<sup>31</sup> Ministry of Defence, 'Strategic Trends Programme: 2007-2036', 23 January, 2007 (third edition), pp. 62-3.

<sup>32</sup> See, for instance, Antony Barnett, 'Millions were in germ war tests', *The Observer*, 21 April, 2002, <www.guardian.co.uk/politics/2002/apr/21/uk.medicalscience> and Rob Evans, *Gassed* (London: House of Stratus, 2000) pp. 349-64.

<sup>33</sup> See note 31.

micrometeorological processes and structure of the atmospheric boundary layer. This program focuses on the interaction of the land-air interface with wind fields, turbulence, and fluxes and on optical methods of detection of aerosols (primarily chemical-biological agents) and the modeling of their transport and dispersion in the tactical environment'. <sup>34</sup>

According to Bradford University's Neil Davison, 'the Ministry of Defence and the US Department of Defense have collaborated on "non-lethal" weapons, including related wargaming, through a Memorandum of Understanding signed in February 1998' — around the time that chemtrailing intensified in the UK. As the Air Force Materiel Command listed 'chemical clouds' as part of its 'wargaming' programme which continued until at least 1999 (and in real terms far after), could these joint 'exercises' have involved chemtrails?

In 1999, the year that the Air Force Material Command announced expanded operations,

'A proposal to develop an Overhead Chemical Agent Dispersion System (OCADS) was accepted for funding....under the Joint Non-Lethal Weapons Directorate's (JNLWD) Technology Investment Program (TIP).'

The purpose of the development effort was to provide the US military with:

'....the ability to rapidly disperse chemical agents over large areas. The dispersed agents can be used for crowd control or to provide a remotely generated protective barrier.'

This work was carried out by Primex Aerospace Company (since acquired by General Dynamics) in collaboration with the US Army's Armament Research, Development and Engineering Center (ARDEC) at Picatinny Arsenal, New Jersey. The final report, published in April 2000, described the successful design, testing, and demonstration of a system comprising a launcher and dispersal device. Crucially:

<sup>34</sup> See note 15.

'The dispersal device itself consists of a liquid canister made of plastic with integrated gas generator to disperse the payload......[T]he technology is adaptable for delivering liquids with differing properties in varying droplet sizes (from 1cm to vapour) and for delivering powders, encapsulated liquids, or projectiles such as rubber pellets. It is also scalable for different distances and smaller or larger areas of dispersion. Subsequently, in September 2001, the Solid Propellant Systems Group at General Dynamics Ordnance and Tactical Systems (formerly Primex Aerospace Company) was funded by JNLWD to carry out further work building on the Overhead Liquid Dispersion System (OLDS) to develop similar liquid dispersal technology for an 81mm "non-lethal" mortar in collaboration with ARDEC'. 35

The 'owning the weather' document stated that unmanned aerial vehicles could be used to deliver nanoparticles for weather control. <sup>36</sup> US Navy documents uncovered by Davison suggest that drones could also be used to deliver biochemical agents, and that tests had been conducted by the Joint Non-Lethal Weapons Directorate (JNLWD), with Hunter and Exdrone UAVs from 1996 to 1997. The drone used smoke munitions in order to simulate 'irritant chemical agent munitions'. A paper unearthed by Davison titled 'Unmanned Aerial Vehicle (UAV) Non-Lethal (NL) Payload Delivery System', which was presented at the Non-Lethal Defense III conference in 1998, stated that 'a UAV-dispenser system could be used with any UAV with a 40 lb or more payload capability. This project was prioritised by the JNLWD during their 1998 review of existing programmes'. Davison goes on to cite a Southwest Research Institute report, regarding funds awarded to them for the delivery of biochemical weapons, stating that

<sup>35</sup> Neil Davison, '"Off the Rocker" and "On the Floor": The Continued Development of Biochemical Incapacitating Weapons', Bradford Disarmament Research Centre (BDRC), Department of Peace Studies, Bradford Science and Technology Report No. 8, August, 2007, Bradford: University of Bradford, pp. 5-17, <www.brad.ac.uk/acad/nlw/research\_reports/docs/BDRC\_ST\_Report\_No\_8.pdf>
36 See note 2.

'engineers developed a computer-controlled unmanned powered Para foil (UPP) equipped with a payload that dispenses liquid spray while in flight. Developed for the Marine Corps Non-Lethal Directorate, the system is intended to provide non-lethal crowd control options for the U.S. military. The UPP was fitted with a pan-tilt camera to continually locate the impact point of the liquid spray. Using computer-assisted flight modes and the camera image, a remote operator can direct the UPP over a target at low altitude and release the spray.'

At his Langley address, Bushnell mentioned the use of binary weapons. It would appear that in addition to 'owning the weather', covert, global, binary warfare began a long time ago with chemtrail spraying.

Keeping in mind that many anti-chemtrail activists have taken water samples after heavy spraying and claim to have found high concentrations of polymer, <sup>38</sup> Davison wrote that in 1999, the JNLWD

'funded a project at the Advanced Polymer Laboratory (APL) at the University of New Hampshire to carry out research in to the use of microencapsulation for delivery of chemical agents. Proposed chemicals included incapacitating agents such as anaesthetic drugs. Reasons for encapsulating chemicals include enabling controlled release and compartmentalization of binary systems. In addition they could be delivered from a variety of platforms such as shotguns, launchers, airburst munitions, mortars, and UAVs.'

According to Davison, Raytheon was awarded further contracts in 1999.

'Military delivery system development, on the other hand, has focused on delivery of chemical agents over long distances to be released as an aerosol or spray over a wide area to affect a group of people rather than

<sup>37</sup> See note 35.

<sup>38 &#</sup>x27;Don't Talk About the Weather', 2008, Ill Eagle Films, <www.archive.org/details/DontTalkAboutTheWeather\_451>

an individual.' 39

In 2010, the UK MoD announced that out to 2040:

'Environmental warfare will be capable of exploiting the delivery and spread of plant and human pathogens through the release of remote controlled insect-machine hybrids or insects, in order to cause physical, and subsequently, financial damage.'

The report added that 'Such methods may be used as incapacitants or as lethal pathogens to attack humans'.

In conclusion: people around the world have noticed the intensification of chemtrailing. A Google search from 2008 yielded 1 million results for 'chemtrails'. Today, the figure is 8 million. The growing public awareness is met with media disinformation and silence. For all the government/militarylinked pseudo-science on so-called 'persistent contrails', scientists, the media, and government bodies cannot argue against the simple fact that unmarked aeroplanes are operating in civilian airspace. Instead of engaging in the pointless chemtrail vs. contrail debate, anti-chemtrail activists would do well to demand to know what unmarked planes are doing in the airspace over their towns. Politicians, air bases, local media, and aviation authorities must be sought and confronted. Activists need to demand to know the make, model, and serial number the planes; why they are deviating from commercial flight-paths; which companies make them; under whose command they are operating; who the pilots are; from where they take off; and where they land. The chemtrails are poisoning us all, and in the pursuit of Full Spectrum Dominance, the spraying will only intensify unless we act.



TJ Coles is a PhD student at the University of Plymouth, UK.

<sup>39</sup> See note 35.

<sup>40</sup> See note 31.