

Weather weapons: the dark world of environmental warfare

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Didn't it rain

Declassified records show that from 1949 to 1955, the Royal Air Force (RAF) released various substances, including dry ice, silver iodide, and salt into the atmosphere at high altitudes in order to induce rain. 'The clouds would then precipitate, pulled down below freezing point by the extra weight of dense particles, thus making it rain sooner and heavier than it might have done', the *Guardian* reported.¹ Using chemicals supplied by ICI, 'international scientists' were involved in the experiments, including specialists from the Cranfield College of Aeronautics and the RAF's meteorological research base at Farnborough. Perhaps the most significant aspect of the programme was that the weather weaponisation experiments continued three years *after* they had produced the worst recorded flood in British history, the Lynmouth disaster of 1952.

The *Telegraph* reported how 'Former RAF servicemen..... described how they took part in the experiments in the years running up to the flood.'² Of Project Cumulus, or Operation Witch Doctor as it was nicknamed by Squadron Leader Len Otley, the BBC reported how the glider pilot Alan Yates sprayed chemicals over Bedfordshire, after which 'Scientists told him it caused a heavy downpour in Staines, 50 miles (80 kilometres) away in Middlesex.'³ This claim appears to be

1 John Vidal and Helen Weinstein, 'RAF rainmakers 'caused 1952 flood'', *Guardian*, 30 August 2001, <www.guardian.co.uk/uk/2001/aug/30/sillyseason.physicalsciences>

2 Sally Pook, 'Deadly flood blamed on RAF rainmakers', *Telegraph*, 31 August 2001, <www.telegraph.co.uk/news/uknews/1339046/Deadly-flood-blamed-on-RAF-rainmakers.html>

3 BBC News Online, 'Rain-making link to killer floods', 30 August 2001, <<http://news.bbc.co.uk/1/hi/uk/1516880.stm>>

disinformation because BBC radio reports confirm that the gliders were actually spraying over Lynmouth village itself.⁴

Concerning the seeding operations that caused the Lynmouth disaster, RAF Captain John Hart explained how, in 1952, 'We flew straight through the top of the cloud, poured dry ice down into the cloud. We flew down to see if any rain came out of the cloud and it did, about 30 minutes later, and we all cheered..... [senior lecturer at Cranfield College of Aeronautics] Alan Yates said the BBC had been filming the experiments, but the resulting programme was abandoned when the country awoke to news of the Lynmouth flood the day before it was due to be broadcast.'⁵

Within a few hours of the cloud seeding operations, some *90 million tonnes* of water fell onto Lynmouth, destroying hundreds of homes and businesses, and causing the deaths of 35 people. Reporting in 2001, 'a BBC investigation has confirmed that secret experiments were causing heavy rainfall', though the Ministry of Defence (MOD) denied any connection between the seeding experiments and the flood. Initially, the MoD even denied conducting any cloud seeding experiments at all. 'Survivors tell how the air smelled of sulphur on the afternoon of the floods, and the rain fell so hard it hurt people's faces', the BBC reported. 'Trees were uprooted and formed dams behind bridges, creating walls of water that carried huge boulders into the village, destroying shops, hotels and homes. Bodies washed out to sea were never found.' The report quoted Tony Speller, a former North Devon MP, saying that when he asked for Ministry of Defence files, 'I could never find anything of any consequence, except the fact that papers were clearly missing for the significant years [1949-55].'⁶

The BBC reported 34 deaths and the newspapers 35,

4 The radio broadcast is repeated in *Don't Talk About the Weather*, 2008, Ill Eagle Films, at <www.archive.org/details/DontTalkAboutTheWeather_451>

5 Sally Pook, 'Deadly flood blamed on RAF rainmakers', *Telegraph*, 31 August 2001, <www.telegraph.co.uk/news/uknews/1339046/Deadly-flood-blamed-on-RAF-rainmakers.html>

6 BBC News Online, 'Rain-making link to killer floods', 30 August 2001, <<http://news.bbc.co.uk/1/hi/uk/1516880.stm>>

and a decade later the BBC documentary *Country Tracks* (broadcast in 2011) confirmed that one corpse — perhaps a member of the secret services dispatched to monitor the operations — could not be accounted for. '[D]ocuments express concern by the [Ministry of Defence] over who would be financially liable if such rainmaking experiments went wrong', the *Telegraph* reported, ending with a citation from a Ministry of Defence statement made in 2001 in light of the revelations: 'Cloud seeding has rarely been successful anywhere in the world. Consequently the Met Office had not pursued this line of research for many years.'⁷ The MoD not only contradicted itself then, because its earlier statements denied involvement in any cloud seeding operations, but it contradicted itself in 2010 by announcing in a public document that out to 2040:

'Weather modification will continue to be explored. The aims are to *obtain more water*, reduce hail damage, eliminate fog, or other similar practical result in response to a recognised need. Manipulation of the weather may affect changes in operating conditions, limit aviation flight envelopes, generate poor visibility while providing concealment and disrupt lines of communications. Weather modification *may also affect morale*.'

Returning home to see your house floating down the river is indeed bound to 'affect morale.'

The MoD continued:

'Analysis by the World Meteorological Organisation (WMO) has shown that, if successful, rainfall enhancement and hail suppression operations could have *significant economic benefit*. The WMO Atmospheric Research and Environment Programme notes that there are several operational programmes in fog dispersion, *rain and snow enhancement*, as well as hail suppression.

⁷ See note 5.

(Emphases added).⁸

Coupled with the Pentagon's commitment to achieve Full Spectrum Dominance by 2020, the fact that the MoD and the US Air Force had the capability to destroy an entire village with 90 million tonnes of rainfall as far back as the 1950s, means we must take seriously the possibility that weather weaponisation is being used, under the cover of anthropogenic global warming (which is no doubt happening, but provides a perfect cover for freak weather events). The US Air Force 2025 think-tank stated in a long-term study that weather weaponisation 'provides opportunities to impact operations across the full spectrum of conflict and is pertinent to all possible futures.' The US Air Force is counting on the fact that 'some segments of society will always be reluctant to examine controversial issues such as weather-modification.'⁹

A brief history of weather weapons

'The nation which first learns to plot the paths of air masses accurately and learns to control the time and place of precipitation will dominate the globe.'

So said General George C. Kenney, Commander of the US Strategic Air Command, in the 1940s.¹⁰ Soon after came Project Cirrus, the first explicit, military rainmaking effort in the West.¹¹ Fifty years later, the United States Air Force, in collaboration with the World Meteorological Office, had come a

8 The Developments, Concepts and Doctrine Centre, 'Strategic Trends Programme: Global Strategic Trends – Out to 2040' (4th edition), The Ministry of Defence, 9 February 2010, p. 156, at <www.mod.uk/NR/rdonlyres/38651ACB-D9A9-4494-98AA-1C86433BB673/0/gst4_update9_Feb10.pdf>

9 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, at <<http://csat.au.af.mil/2025/volume3/vol3ch15.pdf>>.

10 Kenney quoted in James R. Fleming, 'The Climate Engineers: Playing God to Save the Planet', *Wilson Quarterly*, Spring, 2007, p. 55.

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

long way technologically. Under the Director of Weather, the US Air Force operates a Deputy Chief of Staff for Air and Space Operations, who oversees nine Operational Weather Squadrons, each of which has an assigned geographical Area of Responsibility; the Air Force Weather Organization; the Air Force Weather Agency; the 55th Space Weather Squadron; the Air Force Combat Climatology Center; and the Air Force Combat Weather Center. Continental United States Operational Weather Squadrons 'are also responsible for CONUS [Continental US] regional weather support. They produce and disseminate terminal forecasts, weather warnings and advisories, planning and execution area forecasts, and other operational products to Combat Weather Teams', the US Air Force explained over a decade ago.¹²

Collectively, these unit staff are known as the 'weather warriors', who ensure that fighter jets can take off, fly, and land, and they often accompany the Air Force — equipped with mobile weather stations — into combat zones. The US Navy has a comparable amount of weather units. Given the dependence on weather information of the Department of Defense, and, increasingly, the Space Command, the Woodrow Wilson Center's James R. Fleming observed that 'it is virtually impossible to imagine that the world's powers would resist the temptation to explore the military uses of any potentially climate-altering technology.'¹³ Indeed, the US Air Force 2025 think-tank of the Air War College explained in 1996:

'A global network of sensors provides "weather warriors" with the means to monitor and accurately predict weather activities and their effects on military operations. A diverse set of weather modification tools',

– which they hoped to have ready by 2025 (if they haven't already) –

'allows manipulation of small-to-*medium scale* weather phenomena to enhance friendly force capabilities and

12 United States Air Force, 'Department of Defense Weather Programs', undated, circa 1999, at <www.ofcm.gov/fedplan/fp-fy01/pdf/sec3b_dod.pdf>

13 Fleming: see note 10.

degrade those of the adversary' (emphasis added).¹⁴

These ideas are hardly new, and neither is the technology to induce floods or droughts. What is new, however, is the electromagnetic weaponry available to do these things on a global scale, and to accurately plot global weather patterns using a complex array of network-centric weather stations and, in the future, space-based thermal lasers.

In 1945, the mathematician and later US government advisor, John von Neumann, predicted 'forms of climatic warfare as yet unimagined'.¹⁵ In 1948, *Fortune* magazine reported that the US

'Army, Navy and Air Force are spending close to a million dollars a year on weather modification and their tremendous interest suggests that military applications extend far beyond visiting a few showers upon an enemy. It does not require a sharp mind to figure out that wartime storms might readily be infected with virulent bacteriological and radiological substances.'¹⁶

The US Air Force (USAF) reported over a decade ago that their Boundary Layer Meteorology and Aerosol Research Branch

'conducts a research program in the 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

¹⁴ Lt. Col. Jack A. Jackson, Jr. *et al* 'An Operational Analysis for *Air Force 2025: An Application of Value-Focused Thinking to Future Air and Space Capabilities*', *Air Force 2025*, May 1996, at <www.bibliotecapleyades.net/archivos_pdf/2025_report.pdf>

¹⁵ 'Perhaps more dangerous than nuclear war itself', Spencer Weart commented in his 'Environmental Warfare: Climate Modification Schemes', *Global Research*, 5 December 2009. <www.globalresearch.ca/index.php?context=va&aid=16411>

¹⁶ 'Case Study 2: Weather Modification: The Evolution of an R&D Program into a Military Operation', United States Military, undated, p.4, archived at <www.fas.org/man/eprint/leitenberg/weather.pdf>

environment' (emphasis added).¹⁷

This suggests that the USAF is spraying the American public with biological and chemical agents in order to test the efficacy of satellite detection — something that activists call chemtrails.¹⁸ In a 2005 Parliamentary debate, David Drew MP asked the then Secretary of State for Rural Affairs to 'look into the polluting effects of chemtrails for aircraft' in the UK.¹⁹ US Congressman Dennis Kucinich's Space Preservation Act (2001) also mentions chemtrails by name.²⁰ Although the US Air Force dismisses the phenomenon as 'a hoax',²¹ declassified records show, however, that the MoD did the same thing to the British public from 1940 through to 1979.²²

The *Fortune* magazine quote above concerning biological substances strategically placed in storm cells has resonance with the Lynmouth floods of the 1950s. The *Guardian* reported that the MoD also experimented with putting radiological substances into the clouds — what they would call a 'dirty bomb' today.²³ More recently, Dennis M. Bushnell gave a talk to NASA in which he outlined plans for dispersing airborne viruses, such as Ebola and new, specially engineered

17 United States Air Force, 'Department of Defense Weather Programs', undated, circa 1999, at <www.ofcm.gov/fedplan/fp-fy01/pdf/sec3b_dod.pdf>.

18 For this author's experiences with chemtrails, see <www.youtube.com/plymouthchemtrails>.

19 David Drew MP, 'Part 1: Written Questions for Answer on Wednesday 2 November 2005, House of Commons, Session 2005–06 Publications on the internet', *The Questions Book*, Paragraph 124, Questions for Oral or Written Answer Beginning on Wednesday 2 November 2005, <www.publications.parliament.uk/pa/cm200506/cmordbk1/51102w01.htm>

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

21 United States Air Force, 'Contrails Facts', undated, AFD-051013-001, at <www.af.mil/shared/media/document/AFD-051013-001.pdf>.

22 Antony Barnett, 'Millions were in germ war tests', *The Observer*, 21 April, 2002, <www.guardian.co.uk/politics/2002/apr/21/uk.medicalscience>.

23 John Vidal and Helen Weinstein, 'RAF rainmakers "caused 1952 flood"', *Guardian*, 30 August 2001, <www.guardian.co.uk/uk/2001/aug/30/sillyseason.physicalsciences>

nanoviruses.²⁴

In 1953, after Lynmouth had been destroyed, the US established the Presidential Committee on Weather Control, the director of which, Navy Captain H.T. Orville, said that 'If an unfriendly nation gets into a position to control the large-scale weather patterns before we can, the results could be more disastrous than nuclear warfare.' He went on to claim that the Soviets had developed technologies designed to melt the polar icecaps; and it is true that for decades Russia has experimented with ionospheric heating.²⁵ The latter may well be being used today in order to 'liberate shipping and open potentially vast oil and mineral deposits for exploitation', according to James R. Fleming.²⁶

Just as America has been deliberately provoking a race to weaponise space under the pretext of preventing 'a space Pearl Harbor', evidence has emerged that the US has been weaponising the weather under similar pretexts. 'The lowest price for procrastination in this regard (immediate establishment of a rigorous atmosphere research program) will be political, economic, social and military paralysis', a US Navy report alleged in 1960, concluding that 'The highest price will be absolute obedience to the leaders in the Kremlin.' Henry G. Houghton, a meteorologist at MIT, told the US Department of Defense in 1960 that 'An unfavorable modification of our climate in the guise of a peaceful effort to improve Russia's climate could seriously weaken our economy and ability to resist.' This was echoed in a Congressional hearing which claimed to 'know that the Russians are devoting great energy and scientific talent to learning how to control the weather. It is urgent that the United States not fall behind in this race.'²⁷

America's Rear Admiral Luis De Florez reiterated in the early 1960s the importance of weather control on 'the

24 Dennis M. Bushnell, 'Future Strategic Issues/Future Warfare [Circa 2025]', NASA Langley Research Center, undated, at <www.fas.org/man/eprint/FutureWarfare.ppt>

25 Orville cited in 'Case Study 2' (see note 16) pp. 4-5.

26 Fleming, see note 10, p. 48.

27 These quotations are from 'Case Study 2' (see note 16) pp. 5-8.

operations and economy of an enemy [which] could be disrupted.' Such control 'in a cold war (sic) would provide a powerful and subtle weapon to *injure agricultural production, hinder commerce and slow down industry.*' (emphasis added)²⁸ In the 1960s, it was realised that 'Large-scale weather control techniques might be used to *cause extensive flooding* in strategic areas or even to bring a new "ice age" upon the enemy', the US Navy reported, concluding that 'some exploratory research has been conducted on ways to change the heading of major storms.' (emphases added)²⁹

This drive led to the storm modification programme, allegedly undertaken for the benign use of slowing down major storms, called 'Project Stormfury'.³⁰

Historical Use

In 1962, the Pentagon's Advanced Research Projects Agency (ARPA, now DARPA with 'Defense' tagged on) initiated a classified project entitled *Some Upper Atmosphere Aspects of Chemical Geophysical Warfare*. A year later, the CIA began a cloud seeding operation designed to rain off Buddhist protests in Saigon. It was later revealed to be a common practice by the US in Indochina. By the end of the decade, continuing the excuse of needing to prevent a 'weather Pearl Harbor', ARPA launched 'Project Nile Blue', with the stated aim of researching weather modification, because 'it now appears highly probable that major world powers have the ability to create modifications of climate that might be seriously detrimental' to America.³¹

Jimmy Carter's National Security Advisor, Zbigniew Brzezinski, reiterated that the emerging 'techniques of weather modification could be employed to produce prolonged

28 Florez cited in Fleming (see note 10) p. 55.

29 'Case Study 2' (see note 16) p. 8.

30 See, of the many examples on the Net, <[http://en.wikipedia.org/wiki/Hurricane_Debbie_\(1969\)#Impact_and_Project_Stormfury](http://en.wikipedia.org/wiki/Hurricane_Debbie_(1969)#Impact_and_Project_Stormfury)>

31 'Case Study 2' (see note 16)

periods of drought or storm',³² about which the Vietnamese knew all too well. After the Pentagon Papers leak, Seymour Hersh revealed in the *New York Times* that America had been manipulating the weather in Vietnam in order to cause floods. The project was also employed in several other countries and codenamed 'Operation Popeye' (also 'Intermediary' and 'Compatriot'). The US Air Force also confirmed that 'Positive results during this initial program led to continued operations from 1967 to 1972', which 'resulted in a significant reduction in the enemy's ability to bring supplies into South Vietnam along the trail.'³³

Weather modification was not limited to enemy territories. '[A] 1972 U.S. government rainmaking operation in South Dakota was followed by a disastrous flood, and came under attack in a class-action lawsuit. One cloud-seeding airplane was even shot at', Spencer Weart reported.³⁴ In *Rogue State*, William Blum noted how the US also tried to flood Cuba's harvests with weather weapons.³⁵

According to James Fleming, 'Operation Popeye' was not limited to Vietnam: it also flooded Laos, India, Pakistan, the Philippines, Panama, Portugal, and Okinawa.³⁶ The goals were: '(1) Softening Road Surfaces (2) Causing Landslides Along Roadways (3) Washing out River Crossings (4) Maintain[ing] Saturated Soil Conditions beyond the Normal Time Span'.³⁷ Does this sound familiar? This is what we are witnessing across the world (mostly in Third World nations) today. Mudslides are particularly affecting America's 'backyard', as Nixon called Central and South America, with devastation in Colombia, Brazil, Venezuela, and other emerging economic and political threats to US hegemony.

32 Brzezinski cited in Michel Chossudovsky, 'The Elephant in the Room at Copenhagen: Washington's New World Order Weapons Have the Ability to Trigger Climate Change', *Global Research*, 4 January 2002 at <<http://noliesradio.org/archives/9137>>

33 Col. Tamzy J. House *et al.* See note 9.

34 See note 15.

35 William Blum, 2000, *Rogue State: A Guide to the World's Only Superpower* (Maine, Common Courage Press, 2000), p. 109.

36 Fleming: see note 10.

37 'Case Study 2' (see note 16) p. 28

Referring to weather modification in general, 'the effects of these uses on men, animals, and ecology in general are much milder and more transient than those of guns, bombs, defoliants, and napalm', US Secretary of Defense James Schlesinger informed the Pell Committee in 1974, adding, 'there is reason to argue for the use of localized weather modification where possible, as a humane replacement for modern weaponry.'³⁸

The Red Cross did not agree with Schlesinger's assertion about the nicety of weather warfare. In 1974 it held a conference in which it was stated that:

'The expert who put forward the subject of geophysical warfare for consideration stated that it included such activities as the modification of weather or climate and the causing of earthquakes. He stated that man already possessed the ability to bring about on a limited scale certain geophysical changes for which military applications were conceivable. In his view these would inevitably be indiscriminate, and could give rise to unforeseeable environmental changes of prolonged duration.'³⁹

Weather treaties

In 1975 the US and Canada signed a treaty at the United Nations, which prohibited weather modification 'because of their geographic proximity..... the effects of weather modification activities carried out by either Party or its nationals may affect the territory of the other.'⁴⁰ This led to a world-wide treaty on environmental warfare, the UN Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (the ENMOD

38 Schlesinger cited in 'Case Study 2' (see note 16) p. 28

39 International Committee of the Red Cross, 'Conference of Government Experts on the Use of Certain Conventional Weapons', Lucerne, 24.9, 18 October 1974, Geneva: ICRC.

40 United Nations, 'Agreement Between Canada and the United States of America Relating to the Exchanging of Information on Weather Modification Activities', United Nations Treaty Series, Vol. 977, 1-14202, pp. 386-91.

Convention 1977).

The ENMOD Convention was drafted, adopted, and ratified in order 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.' Article 2 clarified that '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 biota, lithosphere, hydrosphere and atmosphere, or of outer space.' Relative to Article 2, the Annex reads:

'It is the understanding of the Committee that the following examples are illustrative of phenomena that could be caused by the use of environmental modification techniques as defined in Article II of the Convention: earthquakes, tsunamis; an upset in the ecological balance of a region; changes in weather patterns (clouds, precipitation, cyclones of various types and tornadic storms); changes in climate patterns; changes in ocean currents; changes in the state of the ozone layer; and changes in the state of the ionosphere.'⁴¹

In 1978, the *New Scientist* had revealed 'the US's efforts to manage weather resources' on a global scale through its Weather Modification Advisory Board (WMAB) – another violation of the ENMOD Convention. The WMAB was an offshoot of the Presidential Committee on Weather Control. 'If the United States wants to wring extra rain out of clouds or gentle hurricane winds (sic)', the WMAB reported, 'it must mount a coherent, sustained, long-term research programme.'⁴² The US did, however, continue its modification programmes. Significantly, a US Army report into the history of weather modification confirmed that

41 United Nations, 'Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques' (ENMOD Convention 1977), Geneva, 18 May 1977.

42 Editorial, 'Report calls for more US research on weather modification', *New Scientist*, 20 July 1978.

'Suggestions to ban the use of weather modification for war or to remove relevant R&D from military sponsorship were reported to have "encountered considerable opposition from the Pentagon", which in fact they had, though this was now after the US use of weather modification in Indochina ['Operation Popeye'] had been publicly acknowledged by the government.'⁴³

Little evidence of weather modification emerges from the 1980s, suggesting that funding was either transferred to Reagan's Strategic Defense Initiative (SDI), or else those weather modification activities have yet to be declassified. For example, Congress approved \$110 billion for SDI between 1985 and 2005, much of it going into R&D for the Airborne Laser.⁴⁴ According to an Air Force Phillips Laboratory weather warfare symposium in 1997, they needed to create 'New weapons systems more sensitive to the atmosphere: Composite materials and lightning; electronic components and lightning; need to involve weather officers very early.' The presentation also mentioned 'clouds and the airborne laser' and 'laser lightning rod to trigger lightning.'⁴⁵

Major Barry Coble claimed that funding for weather weapons 'was eliminated in 1979. Since then there has been no active research effort into weather modification by DOD [the Department of Defense].' However, Coble also mentioned that 'A pulsed laser literally causes water droplets to shatter [evaporate]' ⁴⁶ and it must be possible that the airborne laser, drones, and the coming space weapons will be used for

43 'Case Study 2' (see note 16) p. 7

44 Steven A. Hildreth and Christopher Bolkcom, 'Airborne Laser (ABL): Issues for Congress', Congressional Research Service, Order Code RL32123, 9 July 2007.

45 Arnold A. Barnes, 'Weather Modification: Test technology Symposium '97: Session B: Advanced Weapons/Instrumentation Technologies', Johns Hopkins Applied Physics Laboratory, United States Air Force, Air Force Phillips Laboratory, Air Force Materiel Command, 19 March, 1997, archived at <www.docstoc.com/docs/70885157/Weather-Modification>

46 Maj. Barry B. Coble, 'Benign Weather Modification', United States Air Force School of Advanced Airpower Studies, March 1997, Alabama: Air University Press, p. 3, p. 25 at <www.californiaskywatch.com/documents/pdfdocs/benign_weather_modification_coble.pdf>

weather modification and kept in secret programmes.

According to Radio Free Europe online, the Russian scientist Andrei Areshev suggested that the Pentagon's X-37B unmanned space shuttle (launched in 2010) 'carries "laser weaponry" and could be a key component in the Pentagon's climate-change arsenal.'⁴⁷ The British Ministry of Defence predicted the use of space platforms 'to mitigate the effects of climate change, or to harness climatological features in the support of military or strategic advantage.'⁴⁸ The SPACECAST 2020 study published in 1994 advocated 'a reexamination of this sensitive and potentially risky topic.'⁴⁹ A couple of years later, the Air Force 2025 published a study advocating the use of the Pentagon's complex weather observation satellites to take the next logical step and actually start weaponising the weather. The capabilities of the proposed system are:

'Understanding and predicting local weather effects on military operations

Precipitation inducement or suppression using particulate seeding or directed energy [which is where the airborne laser comes in]

Fog generation/dissipation using directed energy techniques [ditto]

Storm triggering/enhancement using airborne cloud seeding

High-power microwave (HPM) devices (ground-based) and ionospheric mirrors for communications and radar enhancement/ disruption [via HAARP, discussed below]

Ionospheric charging for spacecraft disruption using crossed HPM beams [ditto].'⁵⁰

A decade later, James R. Fleming reported that 'The NASA

47 Ashley Cleek, 'Russian Scholar Warns of 'Secret' U.S. Climate Change Weapon', Radio Free Europe, 30 July 2010.

48 Developments, Concepts and Doctrines Centre, 'The DCDC Strategic Trends Programme 2007-2036', Ministry of Defence, 23 January 2007 (3rd edition), p. 65.

49 Cited in Nick Begich and Jeane Manning, *Angels Don't Play This HAARP: Advances in Tesla Technology* (9th edition) (Anchorage: Earthpulse Press, 2007) p. 68.

50 Lt. Col. Jack A. Jackson, Jr. *et al* (see note 14)

Institute for Advanced Concepts.....provided \$475,000 for atmospheric scientist Ross Hoffman's research on beaming satellite-based microwaves at hurricanes as a means of redirecting them'.⁵¹

We might speculate about how the Pentagon would use such technology in conjunction with cloud seeding, the HAARP ionospheric heater and the Air Force's vast array of weather prediction systems. We know from a BBC documentary broadcast around 1998, posted online, that NASA has had the ability to form clouds for decades.⁵²

Weather Modification Today?

The World Meteorological Organization, the UN Environmental Programme, and the World Health Organization have each confirmed that since 2000, hydro-meteorological phenomena, or water-related weather disasters, have reached record heights;⁵³ and this is at a time when the UK Ministry of Defence confirmed that 'Weather modification will continue to be explored.' Chemtrail activists have documented thousands of hours of military aerial spray operations,⁵⁴ beginning 1996 when the US Air Force announced that by 2025 it would 'own

⁵¹ Fleming (see note 16) p. 58

⁵² BBC, *Extreme Machines*, 1998, <www.youtube.com/watch?v=xURZ-tDYic&playnext=1&list=PL4F48B7AEE20AEA27>

⁵³ World Meteorological Organization, 2006, *Preventing and mitigating natural disasters: Working together for a safer world*, Geneva: Switzerland, <www.wmo.int/pages/prog/drr/publications/drrPublications/html/index.html>

Theresa Braine, 'Was 2005 the year of natural disasters?', World Health Organization, news release, undated (circa December, 2005), <www.who.int/bulletin/volumes/84/1/news10106/en/index.html>;

United Nations Environmental Programme, '2005 Breaks a String of Disastrous Weather Records', 6 December, 2005, <www.unep.org/Documents.Multilingual/Default.asp?DocumentID=459&ArticleID=5084&l=en>

Brynjar Gauti, Julie Reed Bell and Seth Borenstein, '2010's world gone wild: Quakes, floods, blizzards', Associated Press, 19 December, 2010, <www.msnbc.msn.com/id/40739667/ns/us_news-2010_year_in_review/t/s-w>

⁵⁴ *Don't Talk About the Weather*, 2008, Ill Eagle Films, <www.archive.org/details/DontTalkAboutTheWeather_451>

the weather.'

'The purpose of that paper was part of a thesis to outline a strategy for the use of a *future weather modification system* to achieve military objectives', the Air Force acknowledged in 2000 (emphasis added).⁵⁵ In 2008, *Live Science* reported: 'An extensive and previously unknown "twilight zone" of particles in the atmosphere could complicate scientists' efforts to determine how much the Earth's climate will warm in the future.' The report added that 'recent satellite observations have found a zone of "in-between particles" in the air around clouds that was previously considered clear' – and this came twelve years after activists began videotaping world-wide, daily military spraying operations. '[T]he newly detected zone is much more extensive, taking up as much as 60 percent of the atmosphere previously labelled as cloud-free.'⁵⁶

We have seen that the US and UK have had the ability to cause massive floods and droughts for decades, and have used the technologies to devastating effect – even on their own people. Indeed, a US Navy weather modification document acquired by *Wired* magazine stated that the purposes of weather warfare are: '(1) To impede or deny the movement of personnel and material because of rains, floods, snow-blizzards, etc. (2) To disrupt economy due to the effect of floods, droughts, etc.'⁵⁷ The weather weapon platforms are also moving into the space domain it would appear, with monstrosities like the HAARP heater, which targets the ozone layer and the electrojet.

DEGRADE ENEMY FORCES

ENHANCE FRIENDLY FORCES

Precipitation Enhancement

55 United States Air Force, 'Contrails Facts', undated, AFD-051013-001, <www.af.mil/shared/media/document/AFD-051013-001.pdf>

56 Andrea Thompson, 'NASA Discovers 'Twilight Zone' of New Particles', *Live Science*, 11 January, 2008, <www.livescience.com/4447-nasa-discovers-twilight-zone-air-particles.html>

57 Noah Shachtman, 'Navy Research Paper: 'Disrupt Economies' with Man-made 'Floods' and 'Droughts'', *Wired*, 11 February, 2008, <www.wired.com/dangerroom/2008/02/navy-research-p/>

Precipitation Avoidance

- Flood Lines of Communication
- Maintain/Improve LOC
- Reduce PGM/Recce Effectiveness
- Maintain Visibility
- Decrease Comfort Level/Morale
- Maintain Comfort Level/Morale

Storm Enhancement

Storm Modification

- Deny Operations
- Choose Battlespace Environment

Precipitation Denial

Space Weather

- Deny Fresh Water
- Improve Communication Reliability
- Induce Drought
- Intercept Enemy Transmissions

Space Weather

- Revitalize Space Assets
- Disrupt Communications/Radar

Fog and Cloud Generation

- Disable/Destroy Space Assets
- Increase Concealment

Fog and Cloud Removal

- Deny Concealment
- Maintain Airfield Operations
- Increase Vulnerability to PGM/Recce
- Enhance PGM Effectiveness

Detect Hostile Weather Activities

Defend against Enemy Capabilities

The above comes from the Air Force document, *Weather as a Force Multiplier: Owning the Weather in 2025*.⁵⁸ It must be an Air Force standard because it appeared a year later in a PowerPoint presentation given by Johns Hopkins University

58 Col. Tamzy J. House *et al*, see note 9.

specialist Arnold A. Barnes at a 'Weather Modification Test Technology Symposium'⁵⁹ to officials from the Air Force, the Air Force Phillips Laboratory, and the Air Force Materiel Command.

An Air Force document advocating the application of 'benign weather modification' – the biggest oxymoron since 'military intelligence' – noted back in 1997 that 'The Chinese recognize the value of weather modification and believe, incorrectly, that the US military continues to use weather as a weapon.'⁶⁰ The phrase 'incorrectly' is itself incorrect because as that paper was being written, the Johns Hopkins University symposium on weather warfare was taking place.

Weather modification *is* taking place in China. 'The Xinjiang region..... is home to the largest cloud-seeding operation in the world', *Vanity Fair* reported in 2008. 'It is a rare case where no one is blaming global warming for the weather.' The weather modification activities have caused friction between Xinjiang province, where most of China's oil is, and its neighbouring provinces.⁶¹

Geophysical warfare and the HAARP question

Seismologists have had the ability to generate and/or trigger earthquakes for decades. As early as 1933, Japanese military scientists invented a hydrokinetic press that could generate tidal waves.⁶² A couple of years later, *New York American* ran a story which stated that 'experiments in transmitting mechanical vibrations through the Earth – called by [inventor Nikola Tesla] "the art of telegeodynamics"' – were roughly described by the scientists as a sort of controlled

59 See note 11.

60 See note 45.

61 William Langewiesche, 'Stealing Weather', *Vanity Fair*, May, 2008, <www.vanityfair.com/politics/features/2008/05/langewiesche200805>

62 T.D.J. Leech, 'The Final Report Project "Seal"', Department of Science and Industrial Research (Wellington), 18 December, 1950. Wellington: Government Printer, archived at <www.wanttoknow.info/documents/project_seal.pdf>

earthquake.⁶³

Between 1944 and 1945, Britain and America commissioned a New Zealand scientist, Thomas Leech, to conduct a series of highly classified experiments involving the generation of tsunamis by detonating underwater bombs. The successful Project Seal took place in the Pacific and in the waters off Whangaparaoa during the final years of WWII. Project Seal was made public in 1999 when the investigative journalist Eugene Bingham came across then-recently declassified reports in the New Zealand Ministry of Foreign Affairs and Trade archives. Bingham published the findings in the *New Zealand Herald*. '[T]he US and British militar[ies] were eager for Seal to be developed in the post-war years too', he noted. 'They even considered sending Professor Leech to Bikini Atoll to view the US nuclear tests and see if they had any application to his work' (emphasis added).⁶⁴

In a follow-up article, Bingham wrote: 'Tsunami experts believe [the bomb] could be developed to devastating effect. University of Waikato researchers believe a modern approach to the wartime idea.....could produce waves up to 30m high.' Doctor Willem de Lange, of the Department of Earth Sciences, was quoted as saying 'if you had a series of explosions in the same place, it's much more effective and can produce much bigger waves' than the original 1 metre test trials.⁶⁵

Explosion-generated waves became a popular 'scientific' activity during the 1950s and 1960s, with academic

63 Cited in Jason Jeffrey, 'Earthquakes: Natural or Man-Made?', *New Dawn*, No. 89, March-April, 2005, <www.newdawnmagazine.com/articles/earthquakes-natural-or-man-made>

64 Eugene Bingham, 'Tsunami bomb NZ's devastating war secret', *New Zealand Herald*, 25 September 1999, <www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=14727>

65 Eugene Bingham, 'Devastating tsunami bomb viable, say experts', *New Zealand Herald*, 28 September 1999, <www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=14884>

publications on the subject continuing into the 1980s.⁶⁶

According to Jason Jeffrey, 'earthquakes can be induced in five major ways: fluid injection into the Earth, fluid extraction from the Earth, mining or quarrying, nuclear testing and through the construction of dams and reservoirs.' Jeffrey added that 'Geologists discovered that disposal of waste fluids by means of injecting them deep into the Earth could trigger earthquakes after a series of quakes in the Denver area occurred from 1962-1965.'⁶⁷ The *Europhysics News* journal inadvertently suggested that the US triggered an earthquake in Alaska in 1964 by detonating high-altitude bombs.

'The first observation of ionospheric surface waves were obtained after a very large Alaskan quake in 1964. At that time, the ionosphere was monitored for the purpose of nuclear explosion detection, and both the theories and the instruments necessary for the interpretation of the atmospheric gravity waves generated by megatonic atmospheric explosions.'⁶⁸

The Pentagon's High-frequency Active Auroral Research Programme (HAARP), an ionospheric heater, can generate power equivalent to that of a nuclear weapon, and probably much more when pulsed. In the journal *TAO* Professor Sergey Pulnits wrote that 'It is commonly accepted that the Good Friday Alaska [quake in 1964] gave seismo-ionospheric coupling studies its initial impetus.'⁶⁹ The interactions between the Earth's electromagnetic waves and the

66 See, for example, M. Bath, and E. Tryggvason, 'Amplitudes of explosion-generated seismic waves', *Pure and Applied Geophysics*, Vol. 51, No. 1, January 1962, pp. 91-9; J.L. Stevens, 'Estimation of scalar moments from explosion-generated surface waves', *Bulletin of the Seismological Society of America*, Vol. 76, No. 1, February 1986, pp. 123-51; L.D. Trembly, and J.W. Berg, 'Seismic source characteristics from explosion-generated P waves', *Bulletin of the Seismological Society of America*, Vol. 58, No. 6, December 1968, pp. 1833-48.

67 Jason Jeffrey, see note 63.

68 Philippe Lognonné, Raphael Garcia, François Crespon, Giovanni Occhipinti, Alam Kherani and Juliette Artru-Lambin, 'Seismic waves in the ionosphere', *Europhysics News*, Volume 37, Number 4, 2005.

69 Sergey Pulnits, 'Ionospheric Precursors of Earthquakes; Recent Advances in Theory and Practical Applications', *TAO*, Vol. 15, No. 3, September 2004, pp. 413-435.

ionosphere have long been a subject of military interest. In 1968, the *New Statesman's* science correspondent, Nigel Calder, edited a book titled, *Unless Peace Comes: A Scientific Forecast of New Weapons*. One chapter, titled 'How to Wreck the Environment', was authored by Lyndon B. Johnson's Science Advisor, Gordon J.F. MacDonald, who noted:

'Environmental instability is a situation in which nature has stored energy in some parts of the Earth or in its surroundings far in excess of that which is usual. To trigger this instability, the required energy might be introduced violently by explosions or gently by small bits of material able to induce rapid changes by acting as catalysts.....Effects of releasing this energy could be world-wide, as in the case of altering climate, or regional, as in the case of locally excited earthquakes or enhanced precipitation.'⁷⁰

MacDonald also noted the possibility of deep-Earth fluid injection, but claimed that such activities would be easily detectable and therefore no good for covert projects. In 2009, the *Telegraph* reported that a Swiss geologist caused an earthquake when he attempted 'to generate power commercially by boiling water on naturally occurring rocks 3 miles underground.....The pressurised water being sent down the shaft was immediately stopped after [triggering a] 3.4 magnitude quake.'⁷¹

Returning to the use of electromagnetic waves, Lieutenant Colonel Thomas Bearden informed the US Psychotronics Association in 1981 that 'Tesla found that he could set up standing waves.....in the Earth (the molten core), or, just set it up through the rocks' (Jeffrey's ellipsis). It was 'the telluric activity in the rocks [that] would furnish activity into these waves and one would get more potential energy in

⁷⁰ Gordon J.F. MacDonald, 'How to Wreck the Environment' in Nigel Calder (editor), *Unless Peace Comes: A Scientific Forecast of New Weapons*, (London: Pelican, 1968) pp. 119-213.

⁷¹ 'Geologist stands trial for triggering earthquakes in Switzerland', *Daily Telegraph*, 16 December, 2009, <www.telegraph.co.uk/news/worldnews/europe/switzerland/6820811/Geologist-stands-trial-for-triggering-earthquakes-in-Switzerland.html>

those waves than he put in. He called the concept the Tesla Magnifying Transmitter (TMT).⁷²

It is significant and disturbing that the Psychotronics Association expressed an interest in this technology because MacDonald's chapter, quoted above, noted that 'The enhanced low-frequency electrical oscillations in the Earth-ionosphere cavity relate to possible weapon systems through a little-understood aspect of brain physiology.' HAARP emits these low frequency waves.

HAARP

According a Russian State Duma publication in 2002, HAARP 'will create weapons capable of breaking radio communication lines and equipment installed on spaceships and rockets, provoke serious accidents in electricity networks and in oil and gas pipelines and have a negative impact on the mental health of people populating entire regions.' The State Duma pointed out that America is controlling three ionospheric facilities. 'When these facilities are launched into space from Norway, Alaska and Greenland, a closed contour will be created with a truly fantastic integral potential for influencing the near-Earth medium.' The three heaters set-up is the 'Tesla triode' of which Bearden spoke in 1981.⁷³

The inventor of HAARP, Bernard Eastlund, based his 'inventions' on the work of Tesla. Eastlund's ideas included transforming the ionosphere into a plasma that could be directed to destroy incoming missiles upon re-entry. Other ideas included weather modification.⁷⁴ Commenting on his late father's patents, his son Robert Eastlund said: 'The idea was that by heating up the atmosphere, you could move the Jet Stream, bringing rain away from places or taking rain to

⁷² Cited by Jason Jeffrey, see note 63.

⁷³ The Federation of American Scientists, 'Russian parliament concerned about US plans to develop new weapon', No. FBIS-SOV-2002-0808, 8 August, 2002, at <www.fas.org/irp/program/collect/haarp-duma.htm>.

⁷⁴ The details are in Nick Begich and Jeane Manning, see note 49,

places.⁷⁵

Congress approved funding for HAARP in 1990. The project is owned by the US Air Force and Navy, funded through DARPA, and developed by BAE Systems. In 1997, as the Air Force's Geophysical Directive was bombarding the atmosphere with electromagnetic pulses, Bill Clinton's Defense Secretary, William Cohen, spoke at the Sam Nunn Policy Forum at Georgia University, at which he mentioned the possibility of some actors, though he did not specify whom, creating ethno-specific viruses, the Ebola virus, and insect-machine hybrids. We know from Project for the New American Century, NASA, and DARPA documents that the US is working on each of those. Cohen added:

'Others are engaging even in an eco-type of terrorism whereby they can alter the climate, set off earthquakes, volcanoes remotely through the use of electromagnetic waves. So there are plenty of ingenious minds out there that are at work finding ways in which they can wreak terror upon other nations. It's real, and that's the reason why we have to *intensify our efforts*. (Emphasis added)⁷⁶

Given that everything else Cohen mentioned (insect-machines, Ebola, ethno-viruses) are being openly worked on by the Pentagon,⁷⁷ why wouldn't the use of geophysical warfare also be in the pipeline? Just as the Pentagon claimed that it wanted to prevent a 'space Pearl Harbor' and a 'weather Pearl

⁷⁵ Interviewed in *Conspiracy Theory with Jesse Ventura: "HAARP"*, truTV, 2009, <www.youtube.com/watch?v=62ZtPqfvpu8>

⁷⁶ 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>.

⁷⁷ For the development of insect-machine hybrids, see Defense Advanced Research Projects Agency (DARPA), 'Hybrid Insect MEMS (HI-MEMS)', Solicitation Number: BAA06-22, 9 March, 2006. For the creation and spread of Ebola, see Dennis M. Bushnell, 'Future Strategic Issues/Future Warfare [Circa 2025]', NASA Langley Research Center, undated, archived by the Federation of American Scientists, at <www.fas.org/man/eprint/FutureWarfare.ppt>. For ethno-specific viruses, see Central Intelligence Agency, 'The Darker Bioweapons Future', 3 November 2003, <www.fas.org/irp/cia/product/bw1103.pdf>.

Harbor', Cohen was basically saying that the US is engaging in eco-terrorism under the pretext of preventing, what might be called an 'earthquake Pearl Harbor.' Cohen was using the same propaganda coupled with old technologies and new advances in microwave weapons. Also in 1997, USAF's Geophysical Directorate stated that their 'Seismic program' had been transferred to the Defense Nuclear Agency.⁷⁸ This might indicate that nuclear weapons could be used to cause earthquakes, via subterranean detonations or high altitude explosions.

A year after Cohen's speech, the European Parliament published a statement calling for an investigation into HAARP, which 'can, in theory, create geomagnetic pathways to guide particle beams which could then deposit large amounts of energy anywhere on the globe' – just as Cohen said.⁷⁹ It is possible that the 'geomagnetic pathways' are those generated by HAARP's ability to deposit extremely low frequency waves into a given area for the purpose of tomography, or 'x-raying' the Earth for hidden bunkers and mineral resources. According to the Air Force Materiel Command's Geophysical Directive, HAARP could do this as far back as 1996. In 1999, the European Parliament's Committee on Foreign Affairs, Security and Defence Policy drafted a Motion for a Resolution, which was adopted with only one abstention. The Resolution states that the Parliament:

'Considers HAARP.....by virtue of its *far-reaching impact on the environment* to be a *global concern* and calls for its legal, ecological and ethical implications to be examined by an international independent body before any further research and testing; regrets the repeated refusal of the

78 United States Air Force Materiel Command, 'FY97 Geophysics Technology Area Plan', 1 May 1996, Directorate of Science and Technology, Wright-Patterson Air Force Base, Ohio, <<http://dodreports.com/pdf/ada322831.pdf>>.

79 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 at <www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A4-1999-0005+0+DOC+XML+V0//EN>

United States Administration [then Clinton's] to send anyone in person to give evidence to the public hearing or any subsequent meeting held by its competent committee into the environmental and public risks connected with the [project].'

The Resolution continued:

'The project would also allow better communications with submarines and *manipulation of global weather patterns* [the significance of 'global' weather patterns]..... The earth's magnetic field could be disrupted over large areas, which would obstruct radio communications. According to US scientists it could take hundreds of years for the Van Allen belt to return to normal..... It could also influence whole ecosystems (emphases added).'⁸⁰

The Resolution also requested an investigation into HAARP but the investigation was stalled; and, in 2003, the Parliament was told that HAARP 'is a military programme. The [European] Commission has no competence, nor indeed the expertise, to carry out the examination requested by the Parliament.'⁸¹ In 2007 BAE Systems announced that the company had completed the final stages of HAARP.⁸²

Owning the weather?

For several years now, specialists such as the World Meteorological Organization and the United Nations Environmental Programme have reported that water-related weather (hydro-meteorological phenomena) is becoming more frequent and more severe. Are the American military now using weather weapons?

In May 2010, having been warned off by the US, Iran and Pakistan signed a long-standing pipeline deal, and in July

⁸⁰ *Ibid.*

⁸¹ Wallström, 'Parliamentary questions', E-1453/2003, 3 July, 2003, <www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2003-1453&language=EN>

⁸² BAE Systems, 'BAE Systems completes world's premiere facility for ionospheric physics research', news release, Ref. 209/2007, 27 June, 2007, <www.baesystems.com/Newsroom/NewsReleases/autoGen_107527205942.html>

of that year, Pakistan announced that it would not bow to American demands and proceeded with the pipeline construction in July 2010.⁸³ Pakistan was then hit with the worst flood in its history just a few weeks later.⁸⁴ It was reported in Pakistan's *The Nation*:

'We witnessed that when one flood flow passed us by, the meteorological authorities would predict a second storm system developing over the area and warned the nation of subsequent floods of the same or increased intensity. This happened over and over. Then the rumours started spreading. It was alleged that our classic and reliable friend – the United States of America – is manipulating the weather over Pakistan.... [H]ad it been a natural monsoon phenomenon, rains would be widespread not over the same area again and again.'⁸⁵

Six months later, the Balochistan region, through which the pipeline runs, was hit with an earthquake.⁸⁶ 'In its initial reports the US Geological Survey (USGS) said the quake happened at a depth of just 10km..... However, a later bulletin from the USGS revised the depth of the quake to 84km, potentially limiting the effects.'⁸⁷

Earthquake confusion bedevilled other regions. America's *The Nation* reported '...a lot of confusion about the tsunami early warning messages [in 2004].... released by Thailand disaster related agencies such as Meteorological Department, National Disaster Warning Center, and Mineral Resources Department. Japanese seismicists [*sic*] and geologists are being doubtful about the recent Great East

83 See, for example, Kari Lipschutz 'The Iran-Pakistan Pipeline', *Off News*, 14 July, 2010, <www.offnews.info/verArticulo.php?contenidoID=23536>

84 BBC News Online, 'Pakistan Floods: World Bank to lend \$900m for recovery', 17 August 2010, <http://www.bbc.co.uk/news/world-south-asia-10994989>>

85 A.R. Jerral, 'Weather Manipulation', *The Nation* (Pakistan), 14 September 2010, <www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Opinions/Columns/14-Sep-2010/Weather-manipulation>

86 BBC News Online, 'Pakistan: strong earthquake hits south-west', 18 January 2011, <www.bbc.co.uk/news/world-south-asia-12222081>

87 BBC: see note 86

Japan earthquake [in 2011] with 9 magnitude and killed over ten thousand people [in 2011], saying it was an abnormal phenomenon....Moreover, at least 7 earthquakes with magnitude between 5 to 7 had occurred after the killer earthquake near Sendai.' *The Nation* quoted Professor Michio Hashizume of Chulalongkorn University's Department of Geology as saying, 'These series of quakes are not the aftershocks. So far, nobody could explain how these small quakes linked with the earthquake in Sendai.'⁸⁸

In 1999, the European Parliament had reported that America's Alaska-based ionospheric heater, High-frequency Active Auroral Research Programme, could use Tesla resonance technology in order to trigger earthquakes.⁸⁹ The technology has been known since at least 1968, when Lyndon B. Johnson's science advisor, Gordon J.F. MacDonald wrote a chapter titled 'How to Wreck the Environment' for Nigel Calder's book *Unless Peace Comes*.⁹⁰

At the time of the 2010 Haiti earthquakes, *Pravda* reported that a Russian Northern Fleet document 'warns that there is a U.S. plan to destroy Iran through a series of earthquakes.'⁹¹ One HAARP developer, Constance Papadopoulos, told the *Wired* magazine propagandist Noah Shachtman that 'It can't reach Iran..... But if I put Haarp on a ship, or on an oil platform, who knows?'⁹² Why would

88 Pongphon Sarnsamak, 'Scientists puzzled by earthquakes', *The Nation*, 15 March 15, 2011, <www.nationmultimedia.com/2011/03/15/national/Scientists-puzzled-by-earthquakes-30150887.html>

89 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., at <www.europarl.europa.eu/sides_getDoc.pdf>

90 Gordon J.F. MacDonald, 'How to Wreck the Environment' in Nigel Calder (editor), *Unless Peace Comes: A Scientific Forecast of New Weapons*, (London: Penguin, 1970) pp. 119-213.

91 Lisa Karpova, 'Haiti: The U.S. Created the Earthquake in Haiti?', *Pravda*, 24 January, 2010, <http://english.pravda.ru/science/tech/24-01-2010/111809-russia_says_us_created_earthqua-0/>

92 Noah Shachtman, 'Strange New Air Force Facility Energizes Ionosphere, Fans Conspiracy Flames', *Wired Magazine*, 17:8, 20 July, 2009, <www.wired.com/politics/security/magazine/17-08/mf_haarp?currentPage=all>

Papadopoulos need to put HAARP on a sea platform when an ionospheric heater already exists near Iran in Tajikistan?⁹³ Within a year of the *Pravda* warning, Iran and Pakistan were hit with an earthquake.⁹⁴

The exploitation of the atmosphere for weather modification and/or geophysical warfare is strictly prohibited by the ENMOD Convention (1977). The exponential rise of hydro-meteorological phenomena in countries that the US had explicitly targeted for new types of warfare, coupled with the frequency of hard-to-explain earthquakes, should be enough to make us seriously consider the possibility that environmental warfare is now a part of America's New World Order canon.

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(www.axisoflogic.com)*

93 Begich and Manning, *Angels Don't Play This HAARP*, (see note 49) p. 194.

94 For several years, DARPA has had a Gravity Anomaly for Tunnel Exposure system in its possession, which reads gravitational anomalies in the Earth in order to map the location of tunnels. According to David Hambling in *Wired* * DARPA 'has already reached the stage of integrating the gravity gradiometer and signal processing payloads and mounting them in an unmanned aircraft, and have been "verifying performance in relevant geologic environments.'" Hambling added that 'there is a parallel Seismic and Acoustic Vibration Imaging effort' at DARPA, which the organisation 'describes as a mobile system using "an integrated, laser vibrometry system to detect seismic wave anomalies." This might be another airborne sensor', Hambling reported, 'though it might still need to drop something to produce shockwaves to create the seismic and acoustic vibration to be detected.' That 'something' could be pulsed electromagnetic power, or waves, that match the frequency resonance of the targeted area. The amplification could cause seismic vibrations, thereby triggering earthquakes.

* 'Pentagon Scientists Target Iran's Nuclear Mole Men', *Wired Danger Room*, 12 January, 2010, <www.wired.com/dangerroom/2010/01/irans-nuclear-molemen/>