

## Brainwashed Canadians sue CIA

**N**INE Canadians who were victims of brainwashing experiments funded by the CIA in Montreal 20 years ago are suing the US government for \$1 million each in compensation. All have suffered lasting psychiatric damage as a result of the experiments which they paid for, believing them to be part of conventional treatment for their mild psychiatric disorders. Now the Canadian government is refusing to release documents which could help their case.

The victims were all patients of Dr Ewan Cameron, who was the founder and head of the Allan Memorial Psychiatric Institute in Montreal and the first president of the World Psychiatric Association. Cameron's experiments

involved a severe form of electroconvulsive therapy followed by several weeks of drug-induced sleep to make the patient forget the experience.

The project was funded by a CIA front organisation in New York, called the Center for the Investigation of Human Ecology. It is not absolutely certain whether Cameron, who died in a mountaineering accident in 1967, knew what the ultimate source of his funds was.

The connection between a CIA brainwashing project, named MK-ultra, and the Allan Institute first came to light in 1977, when civil libertarians in the US requested information on "behavioural experiments" mentioned during Senate hearings on covert activities. The activists received 14 000 pages, describing CIA attempts to counter an alleged threat from Communist brainwashers.

Since then, 11 of Cameron's former patients have come forward. But another 41 Canadians are unaccounted for. Pressure groups in Washington are looking for hundreds of American victims of 11 similar projects in the US. Some victims may still be hidden in mental institutions. Others may have committed suicide. At least one suicide case is known to have followed Cameron's treatment.

Cameron administered an extreme version of electroconvulsive therapy developed in Britain in the 1940s to treat severe psychotics. But he used it against victims of mild "psychoneurosis". And, while the British psychiatrists recommended discontinuing the treatment if the patient became "disoriented", this was exactly the effect that Cameron wished to achieve.

Electroconvulsive shocks are still an approved treatment for severe depression, but at less than a tenth of the intensity at which Cameron used them. Instead of 100 volts given for under half a second, Cameron gave 150 volts for a second, repeated up to nine times. Instead of shocking the patient two or three times a week, Cameron did it two or three times a day for three or four weeks, often during barbiturate sedation. He also administered the hallucinogenic drug LSD, brought from Switzerland specially for the purpose.

The treatment eventually produced what Cameron called "depatterned" patients

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### MEDICAL THERAPY

5040. Cameron, D. E. Production of differential amnesia as a factor in the treatment of schizophrenia. *Comprehensive Psychiat.* 1966, 1, 26-34.— "Differential amnesia regularly appears as a consequence of depatterning by means of intensive electroshock therapy or electroshock and prolonged chemical sleep. This phenomenon consists in the patient showing a considerably greater amnesia for his schizophrenic behavior than for his concurrent normal behavior." The period prior to treatment. There was a significant degree of correlation between the differential amnesia and the reasons for the most

Cameron (top) and an abstract from his work

who forgot who and where they were. Then Cameron began "psychic driving", the repetition of messages for up to 16 hours a day, designed, he said, to repattern their brains in a less neurotic form.

Many patients, however, refused to cooperate with the hypothesis, and had to be "kept alert with amphetamines, receptive with amytal" and paralysed with curare "because of a tendency to leave the repetition area", according to Cameron.

Many of Cameron's patients were barely mentally ill at all. Velma Orlikow had post-natal depression. Robert Logic had "psychosomatic" leg pains, which later responded to conventional medical treatment. Mary Morrow, a psychiatrist who had come to Cameron for a job interview, was told she was "nervous" and ended up in the depatterning laboratory. All the patients so far discovered have since suffered severe depression, amnesia, migraine, anxiety and insomnia.

Cameron ran a dictatorial regime. Orlikow recalls "he was like God. He had complete power over us". Jeanine Huard, who claims the treatment destroyed her life, says she was threatened by Cameron when she tried to flee the Institute. Orlikow remembers patients who, staff said, had been "transferred to other hospitals". But she subsequently recognised them on the wards, speechless, incontinent, and "reduced to vegetables".

Jay Peterzell from the Center for National Security Studies in Washington believes that Cameron knew that the CIA funded his experiments. The treatment was followed by up to a month of drug-induced sleep to make the patient forget the treatment. "There is no conceivable medical

purpose in making a patient forget therapy," says Peterzell, "but there is an obvious intelligence purpose."

After Cameron's death, his successors disowned the depatterning programme that he ran. But, until then, Cameron published his techniques and results, though these rarely amounted to more than a few months' altered behaviour. His patients' records, which left the institute with him, have not been found.

The CIA's director, Richard Helms, ordered the destruction of the agency's records of the Cameron link in 1974. But a few papers survived. They form the basis for the case in the courts.

The Canadian government has refused, at the request of Washington, to release correspondence between it and Washington about the Orlikow case. Last week, the Canadian Department of External Affairs said the US had apologised for its violation of Canadian sovereignty in funding the secret experiments. But a spokesman confirmed last week that the apology was verbal, and that it could not be released to the plaintiffs. Last week, Washington formally asked Canada not to release any correspondence concerning the case.

Peterzell believes that experiments might have been done in other countries. The CIA documents refer to "allied governments where the security service has people under its control". □

Advances in technology in non-ionizing electro-magnetic radiation (EMR) present immediate and critical dangers to health and human rights.

Advances in technology in non-ionizing electro-magnetic radiation (EMR) present immediate and critical dangers to health and human rights. There are very clear indications that they are being used to the detriment of international peace and security, and are threatening fundamental freedoms, the dignity of the person and social progress. (1)

Research in the area of EMR reads like an anti-personnel manual in covert operations on how to condition, control behavior, disrupt health or destabilize.

The following are illustrations pointing to potential or actual use of EMR for behavior modification or in anti-personnel systems. Similar health risks may follow from environmental exposure.

1. Jose Delgado (a researcher who has been CIA funded and is known for implantation of stereotaxic electrodes in the brains of prisoners and mental patients to control their behavior) now uses electro-magnetic fields without direct brain contact to manipulate behavior. Fields as low as  $1/50$  the strength of the earth's magnetic field (a fluorescent light would expose one to more intense bombardment) have a profound effect when the signals are tuned to precise frequencies. (2)

He can cause fighting fish and other animals to become pacified. Extreme behavioral changes set in within an hour in monkeys kept under minute precise frequencies that could not be sensed with the hand, seen or felt. Under the influence of the differing fields they became hyperactive, began to sleep or were manipulated like toys. (3)

He also discovered that chick embryos can be grossly deformed by infinitesimal amounts of energy. He was so concerned about the specter of genetic mutation that he went home to check the electric appliances in his kitchen. (4)

With the very same extremely low frequency (ELF) magnetic fields at a certain frequency and power intensity, cats could be made to purr, lay down or roll over. Pregnant animals exposed to the same fields gave birth to offspring who exhibited drastic degradation of intelligence later in life. (5)

Scientist Alan Frey conducted experiments where rats who were accustomed to fight viciously when their tails were pinched, accepted the pinching with relative passivity when irradiated with pulsed microwaves in the ultra-high frequency television range at the very low power density of one milliwatt per square centimeter. (6) Peak human resonant frequency lies right in the middle of the VHF television range. (7)

2. Scientist Ross Adey (close personal friend of Delgado) cooperates with the CIA designing exotic energies to control behavior. (8) (9) He has intensively studied the "windowing effect": certain results are produced at some frequencies and power levels, but not at others interspersed between the effective ones. (10) Certain amplitude windows are highly psycho-active, and higher or lower levels are not gated or resonated by the mind. (11) The assumption that greater than natural intensities enhance an effect, as with ionizing radiation, is not valid. In fact, the lower the power, the greater the effect, provided an effect was present to begin with. (12) Energies lower than the earth's magnetic field, and lower than human EEG itself can have a profound behavioral effect if windowed or

gated properly. (13)

3. Human perception may be a direct result of primarily electrical, then chemical activity of the brain. Non-linear electro-magnetic field (EMF) phenomena can control essential chemical processes in living cells and directly interact with neuronal synaptic function. (14) EMR is perceived as "direct information" if amplitudes, frequencies, waveforms are within a certain range (windowed to resonate with the brain), thereby making it possible to alter psychological states, and to transmit suggestions and commands directly into the brain. (15) Molecular vibrations caused by a stimulating extracellular electro-magnetic field are non-linear, and take the form of soliton waves which, it is felt, propagate along the cell membrane. (16) Severe and subtle alterations in thought and behavior can be predictively produced, rendering theories as to the physics of how they are produced of interest only in so far as they can be exploited to attain more complete control of behavior, and of how control of behavior can be prevented. Normally, it would be difficult to determine whether perception has been altered. (17)

There is a large body of information on electro-magnetic fields, frequencies, waveforms, modulations and other parameters (especially on ELF) and their effects (18), but some precise technical data, and predictive application models are difficult to obtain: they are held in confidence by scientists (19), or in secret by intelligence agencies.

4. A scientist in Los Angeles, California, used a pocket sized extremely low frequency (ELF) transmitter, and at power levels of under 100 milliwatts drastically altered the moods of unsuspecting persons -- he abandoned experiments after dramatic proof, due to ethical considerations. (20)

5. Shielding EMR in its psycho-active frequencies is virtually impossible. (21)

6. EMR and magnetic signals can be broadcast to any part of the world and be re-radiated by power lines, water pipe grids, power supply grids or telephone lines at any frequency desired, which then modulates all of the other frequencies within the waveguide. I.e. properly transmitted by a transmitter of relatively low power, they "piggy-back" to any pre-existing radio frequency power source and produce disturbances in the ionosphere at any frequency desired. (22) This can be accomplished upon individual dwellings or whole geographical areas. To escape detection, "window effects", by-products, or what seem to be by-products of communications systems based on UHF, VHF or microwaves (or a combination) can be used. Research suggests that the best way to get an ELF signal (which can be highly psycho-active) into an animal is to make it a pulse modulation of a high frequency radio signal. (23) EMR pollution can be modulated to brain wave frequencies to create confusion and other desired effects.

Stepan Rednip, an American reporter living in England, claimed to have seen CIA documents proving the existence of a program called program called Operation Pique, which included bouncing radio signals off the ionosphere to affect mental functions of people in selected areas, including Eastern European nuclear installations. (24)

7. In a large percentage of persons, brain waves become "locked in phase"

or entrained to pulsed EMR that is tuned to the same frequencies as brain waves, similar to a baby breathing in the same rhythm as its mother. (25) E.g. if a field is pulsing at the same rhythm as alpha, a natural rhythm associated with relaxation, the brain will start to produce more alpha. ELF fields are at or near brain wave frequencies. (26) Some ELF fields tend to produce symptoms of confusion, extended reaction time, hemispheric EEG desynchronization and other vegetative disturbances, making these useful supplemental anti-personnel weapons or tools for operative conditioning. (27) Some properties of ELF magnetic phenomena, rather than related psycho-active modalities, make it a viable choice to manipulate the behavior of groups. (28)

8. Microwaves pulsed at specific rates can be heard. Audiograms, i.e. analogs of the word's sound vibrations, can be made. Applications for anti-personnel use and covert operations designed to confuse, drive a target "crazy" with voices, to deliver undetectable instructions to a programmed assassin, or to invoke ideas or thought associations keyed to electro-magnetically induced effects (feelings, moods or other sophisticated effects) are obvious. (29) Female voices can be replicated ("a voice within") and keyed to EMR induced feelings. Audiograms or voice prints can be made to sound distinctive (e.g. like a particular political leader, etc.)

The CIA funded work at University of California, Los Angeles, to develop microwave broadcasting equipment which could carry human voices into victims heads for the purpose of inducing hypnosis at a distance. (30) In 1974, the CIA funded experiments by J.F. Schnapitz to investigate conveying the spoken word of the hypnotist by electro-magnetic energy directly to the subconscious parts of the human brain -- i.e. without employing any technical devices for receiving or transcoding the messages. As a preliminary test of the concept, he recorded brain waves induced by certain drugs, then modulated them onto a microwave beam and fed them back to an undrugged person's brain to see if the same states of consciousness could be produced by the beam alone. (31)

His main protocol consisted of four experiments. First, subjects were given a test in which they would know some of the answers, but not all. Later, while in hypnoid states they were irradiated with "information beams" suggesting answers for questions they had left blank, amnesia for some they had answered correctly, and memory falsification for other correct ones.

The second experiment was the remote implanting of hypnotic suggestions for simple acts, like leaving the lab to buy some particular item, which were to be triggered by a suggested time, spoken word or sight. He anticipated that they would rationalize their behavior and consider it to be undertaken out of their own free will.

The third test consisted of administering personality tests, then different responses to certain questions would be repeatedly suggested through microwave audio-modulation. (32)

The fourth test was to induce a standard hypnotic trance by means of microwave beams alone.

Information about these experiments was released under the U.S. Freedom of

Information Act, and the results haven't been made public. Probably scientists were far enough ahead of this research plan, so that it was quite tame enough to release.

9. The same sophisticated microwave equipment that is used for remote eavesdropping can also be used to project behavior modifying EMR. (33) This kind of equipment is used against many target groups in the Third World. (See note 34.)

Recordings of victims can be made with remote eavesdropping equipment, then using subliminal high frequency sound, the key ideas played back with the feeling supplied by behavior modifying EMR. Aversion to ideas can be created in this way, as well as acquiescence, with (simplistically) unpleasant or pleasant feelings, or with more sophisticated EMR effects or combinations of effects, evoking "instinctual" replications of "doubt", or the idea of risk, threat of loss or of injury. Temporary "paranoia" can be remotely induced by frequencies that electronically jam the synaptic connections of the brain. (35) EMR can be virtually undetectable if "windowed" at low frequencies, used sporadically or as signals to trigger memory of feelings that have been conditioned or implanted by remote hypnosis. (36)

Confusion is also easy to induce and can be linked to ideas. (37)

Sophisticated subliminal audio may be difficult to trace, as there are so many channels (38), and work may be done in the sleep of the victim. After initial conditioning, audio can be used more sparingly, as memory, once neuro-linguistically programmed, i.e. programmed with ideas or words linked to feeling, will supply on signal the topic that was injected in the past. (39) A distinctive electro-magnetically induced feeling or sound, or the first few letters of a word can each be used to cause recall of a thought, the same as a signal in hypnosis. This would be aimed primarily, however, at upsetting the proper functioning of security forces, or at attitudes or the decision making process in political thought. Once signals have been made, they can be used on any topic (e.g. this feeling always signifies something that is "good", supportive, the way to success; or this is aversion and failure, etc., like classical Pavlovian or operant conditioning.)

Remote signalling of strong aversion, preference or indifference to affect behavior change is a valuable and coveted tool for use in politically sensitive areas. (40)

With remote signals there is lessened risk of detection, because even if they could be monitored by security forces, it would be difficult to attribute them to conditioning techniques. The idea of mind control, if it happens to surface at all, can be linked to aversion or to an electro-magnetically induced feeling that it is harmless, i.e. a feeling without the appropriate instinctual response to so dangerous an intrusion, like the cat that would purr and roll over in the experiment referred to in #1, above. Instincts are adjusted. Probably at times, the idea has been invoked or "injected" for the purpose of causing it to be rejected as ineffective, and to cause this estimation to be held as an opinion. Whole contingencies can be programmed in a like manner, to defeat the inclination to take effective action on any issue. Much experimentation on

manipulating against natural instincts with remote hypnosis and conditioning, and on the behavioral effects of EMR has taken place in years gone by and continues. (41)

Memory (if robbing perceptions and clarity of thought isn't enough) can be remotely electro-magnetically smudged or destroyed. (42) As well, events can be made to seem to have happened later than they really occurred.

High frequency subliminals aren't so subliminal to some (43); there are varying degrees of awareness. (44) Simplistically, to mask cognisable distractions or instructions emanating from thin air, a comfortable feeling induced by EMR would tend to adjust perceptions enough so that the manifestation in thought would tend to be of something familiar or non-threatening. Also, audio personifications of the mainstay EM induced feelings can be used. I.e. subliminal audio characters that are mental anchors, linked concurrently to feeling induced by psycho-active EMR. This would insure more that the feelings would be associated with our sphere of activities and not with a behavior modification system. During the course of thought one tends to think of what peers, political allies and friends, and perceived foes or threats might think. Ideas or personifications of these can be made -- "good and bad forces", threats and allies, a religious leader in the area, one's girlfriend, family, one's effective security forces who understand the dangers that a man is exposed to, advice from a "special one" on which one is to rely (after a subliminal threat) who ensures "success" (with a better feeling.)

Names can be used from intelligence files, as can particular information, such as assessments of weaknesses or predilections. Schisms or factionalism can be created or fed. E.g. a bad feeling, subliminal threat or aversion induced by EMR can be exploited by having it linked to thought of a person or idea that influencer wants to defeat. The same technique can be used for "good feelings". A system of threats and promises can be built in this fashion. Strong emotions such as anger or annoyance can be made to be associated with a "threat over there". Many illusions and tricks can be played with perceptions. A "crazy" or sickened feeling or weakness may be electro-magnetically imposed and caused to be related to an idea, group or leadership of groups, and this can be done habitually. After the idea to be modified is invoked, the artificial EMR feeling substitutes for the natural instinctual feeling that one would have on the subject, and this reflects as changed thought. The idea of "the best that one can do" in a given situation can be invoked, then undermined with EMR "overlay". What was positive becomes negative or a matter of disinterest.

Covert influence can be had on isolated issues, or standard conditioning patterns can be inculcated for use at a later time to disrupt decision making processes, security precautions or evaluation of prospects for success. One's predilection or tendency toward solution of a problem would be the idea linked to a "better feeling" (signal) after remote operant conditioning with a series of sophisticated EMR signals that induce aversion and other feelings.

When work is done "breaking in" a new victim, it is probably done at night. There is research to supporting the concept of twilight-state hypersuggestibility, when there is a loosening of reality-oriented frame of reference and of critical faculties. In a light sleep or drowsy, one may be as suggestible as when in a hypnotic trance. (45)

There are also EMR frequencies that induce suggestibility, and ELF frequencies that can cause EEG patterns similar to "meditative" states, "relaxed alertness", "alert focussing", as well as to desynchronize EEG between left and right brain hemispheres, productive of confusion. There are tricks based in hypnosis to cause one brain hemisphere to predominate, thus enhancing uptake of a certain kind of message, while blocking rational understanding. (46) The basic pattern, including threats and promises would be inculcated, with personifications of the main EMR feelings, especially aversion and reliance. Basically, signals would be instilled. A comfortable feeling with the idea of trust would be made. There have been dramatic results on the theory of preconscious conditioning with the much studied subliminal "mommy and I are one". (47)

What might be to one a noticeable or vague and disturbing intrusion of, for instance, three days could probably be passed off as some sort of "passing episode" (perhaps as heightened awareness of one's standing in relation to "forces!") After a severe disturbance there would be a lessened tendency to spring to action when the same thing is repeated again and again, only more subtly. (48) Probably much work has been done to determine how far can be gone without awareness of a system being used, and if there is awareness, how to avoid the instinctual reaction to take action. Experiments in the lab would probably include exposing a subject to persistent threats, while using EMR and various subliminals and noting EEG response and other indicators. Technology to remotely measure EEG probably exists and is used in the field.

Intelligence has had a great interest in substances that increase susceptibility to conditioning or hypnosis. (49) There may be biologicals that create a permanent state of susceptibility, i.e. that increase synaptic input and that can be used in small quantities, inhaled or used to contaminate food or water. In this context, the CIA when writing of maintaining an offensive capability in manipulation of human behavior, and of testing substances to facilitate that goal, admitted attempting to set up testing programs overseas on indigenous subjects. (50)

10. Subjective awareness means that we relate feelings and moods to our sphere of activities, so that operant conditioning may be affected upon us, and logic patterns based, to put it simplistically, on "good" and "bad" feelings which have been elicited by EM systems. These will tend to be attributed by our perceptions to those around us and to our pursuits (i.e. we will feel that anger, disgust or confusion can not be divorced from a specific object.) This tendency can be exploited. Furthermore, discriminative or critical awareness and creativity can be reduced by remote EMR, so that lower emotions and feeling, or confusion will more likely become part of the calculus of thought and the basis of decision making. (51)

On the possibility of winning compromise: first a strong thought association or mental anchor would be made of the goal with a good feeling, to which there would be little resistance. When the anchor is set, it would be invoked and then a "bad" EMR feeling tone would be used to erode or undermine it. The good thought association will become a matter of disinterest, frustration or other negative aversion. (See note 52) One could be habituated from a long time to form strong thought

associations of success or one's "best prospects" with both EM and subliminal audio, and then the bundle of prospects can be undermined or eroded, thus affecting self image in relation to success. Sophisticated patterns can be devised using this method, and routines designed to use over and over again to influence decision making processes.

A system to slow the progress of target groups can be made. Positive thoughts about the most progressive or desirable course of action can be invoked (some of this can be done in the sleep of the victim) and then smudged with EM feeling tone that conjures frustration, an "instinctual" replication of doubt or a general bad feeling. In other words, EM induced feelings are "overlaid" so that thought on a subject changes. This can further be exploited by attributing the bad feelings imposed by EMR to persons or groups, e.g. persons in other factions could cause one's failure, the Soviets really aren't such good friends, etc.

A skeleton system or computer system of EMR could be used that would impress a pattern of feeling tones such as "success/failure" and "rely on this compromise", etc., with special work to be done later to include particular ideas and names in the positive and negative parts.

For a system, all one need do is study the EMR's effect, in terms of its manifestation in thought and apply it. Such research has been going on for years, both in the laboratory and in the field. (53) Of course the object of any such system is to limit intelligence, create acceptance in the wishes of the influencer, and to have one accept the injury as the norm, without awareness of the damage being done, or accepting the intrusion as harmless if one happens to become aware.

The result of such a system is the perpetuation of thought patterns that will be mirrored in our endeavors, health, security measures, etc., limiting options in each. Weakness, confusion or acquiescence would be keyed to "well-being": that's the inevitable intelligence defeating logic of mind control and hiding a system. Ideas linked to feeling tone is the gist of this type of system.

If one can control instincts (feeling) and concurrently link thought, a particular idea, or the name of a person to it, one can easily influence political processes, and perceptions of the seriousness of the threat of the intrusion. Reputation and the face or image of leaders can be debased. Security can be breached by making a safe or positive feeling in the face of danger and a rejection of natural instincts.

To illustrate how effective remote EM change of emotions and instincts can be: in one of Delgado's experiments, a mother giving continuous care to her baby suddenly pushed her infant away whenever a signal was given. (54) Even in the political realm, without knowledge of the sophisticated parameters of covert influence, such a radical incongruous response as this, even if habitual, would probably not easily be attributed to mind control.

The physical basis of thought has been discovered. Investigations with human subjects have identified the brain structures critical for the formation of new classes of memories. The majority of intellectual and emotional characteristics is either learned or modified through life experience. Neural pathways involved in



learning and the cellular change that makes behavior modification possible have been discovered. (55) Neurolinguistic programming, which is highly effective and the basis of both hypnosis and conditioning can be done with electro-magnetically induced feeling. Neurolinguistic programming means that anchor thought associations are attached to feelings and are the basis of learning and behavior. (56)

The neurolinguistic code of language is being broken. (57) Words can be read through EEG patterns. (59) Over nine years ago, a mind reading machine was developed. It could recognize a limited number of words by monitoring a person's silent thoughts through EEG patterns. (60) Brain mapping is highly developed. (61) These advances can easily be used for manipulative and invasive purposes, if in the wrong hands. (62)

Sophisticated impressions can be elicited electro-magnetically. Microwaves can be modulated precisely and can be used remotely to selectively enhance conditioned responses by shaping them with rhythmic variations in amplitude (height) corresponding to EEG frequencies. (63) Approach/avoidance conditioning can be achieved for any action simply by remotely stimulating the pleasure and pain centers in an animal's or human's limbic system. (64) Libido may be affected and linked to thought (it may be that disinterest can be caused this way) Monitoring of evoked EEG potentials followed by using microwave and other radio frequency broadcasts designed to produce certain moods or thoughts, poses a serious threat. (65)

11. Adey's calcium outflow windows can be used to interfere with the functioning of the entire brain and is one of the bases of "confusion weaponry." (66) In one secret CIA experiment, a scientist was reportedly set up with invitations to the conferences to give the same presentation at each. The first one went fine, but at the last two he was irradiated with ELF waves, to induce Adey's calcium efflux, and he became confused and ineffective. (67) Using other frequencies reaction time can be significantly delayed. (68)

12. General impaired resistance and subliminal stress, which is a major predisposing factor toward disease, can be easily induced for covert anti-personnel use in order to erode an enemy. (69) It can also easily be disguised as part of a communications system.

13. Scientist Allen Frey discovered that certain pulsed microwave beams increase the permeability of the blood-brain barrier. This can be used as a supplemental weapon to enhance the effects of drugs, bacteria or poisons. (70)

14. A significant relationship has been shown between psychiatric disturbance as reflected in hospital admissions and the intensity of natural magnetic fields, proving a significant relationship between external fields and behavior. (71) Consider that the earth is blanketed with communication systems that upset its electro-magnetic balance.

15. EMR can increase susceptibility to cancer. It has been shown to hasten induction and spread. (72)

16. Circadian rhythms are thrown off at signals lower than the earth's magnetic field. (73)

17. Artificial excitation by ELF can include sensations of de-ja vu; depersonalization or vertigo; prominent vestibular sensations, such as moving up or down; auditory sensations where hearing is equated with knowing; and, increased feeling of meaningfulness in general. (74)

18. A group at the Naval Aerospace Medical Research Laboratory in the U.S.A. has a continuing contract to find EMR beams effective against human tissues to disrupt various metabolic functions. (75)

19. Scientist Dietrich Beischer found a 50% rise in triglycerides in nine out of ten human subjects from a one day exposure to a magnetic field as would be produced by the ELF antenna during a preliminary study for the Navy's Project Sanguine (a submarine communications system.) (76)

20. Weather can be easily modified with EMR, making it feasible to induce catastrophic climate change over a target country to destabilize. (77)

#### Notes

1. A subsequent report will treat in more detail parameters and extent of experimentation, and indications of use, and key them to applicable international human rights, weapons and environmental accords.

2. Kathleen McAuliffe, The Mind Fields, OMNI (Omni Publications, New York, N.Y. February, 1985) pg.41

3. Ibid. pg.42

4. Ibid. pg.s 42 & 96

5. Independent Scientific Network, ISN News, Reproductive Hazards From Video Display Terminals (Planetary Association for Clean Energy, Ottawa, Canada, 1985) pg.s 1-3

6. Paul Brodeur, The Zapping of America (Dell Publishing, New York, N.Y., 1976) pg.295

7. Robert O. Becker, The Body Electric: Electromagnetism and the Foundation of Life (William Morrow and Co., Inc., 1985) pg.312

8. Walter Bowart and Richard Sutton, Invisible Third World War, FREEDOM, Vol.17, No.s 12 and 13 (Church of Scientology, Los Angeles, California, 1985) pg.15

9. Ross Adey wrote the original World Health Organization Environmental Criteria report of ELF. His colleague Asher Sheppard who has whitewashed on the biological impact of magnetic fields for both government and industry, was Rapporteur for the final draft. See Becker, op. cit. pg.283 for background on Sheppard.

10. Becker. op. cit., pg.312

11. Robert C. Beck, Instrumentation for Detecting, Recording, and Analyzing Natural and Man Made ELF Signals and Human Brainwaves (available from the author, 1538 Cassil Place, Los Angeles, California) 1978

Beck has been a consultant to the Navy's Office of Surface Weapons. He has designed and built extremely sensitive magnetometers for the Navy. He is also a consultant to Sondia Corporation and a Senior Staff Scientist at Eyring Research Institute.

12. Eldon Byrd, Implications of Non-Linear Interactions in Biological Systems, ARCHAEUS, Vol.1, No.1 (Archaeus Project, Minneapolis, Minnesota, 1984)

Byrd works for the U.S. Naval Surface Weapons Center and has had contracts to develop electro-magnetic devices for behavior modification for clandestine operations, hostage removal, and so on. See McAuliffe, op. cit. pg.104 for a short account of Byrd's work in this area.

13. McAuliffe, op. cit. pg.42

14. Byrd, op. cit. pg.2

15. Dr. Stephan Possony, Scientific Advances Hold Dramatic Prospects for Psy-Strat. Defense and Foreign Affairs, July, 1983 (Washington, D.C.) pg.34

Possony was a psychological warfare specialist during World War II. He is on the board of directors of several CIA "front" groups, including American Security Council. He was a member of the American Chilean Council, which is registered as a foreign representative of the Chilean Junta. He was also a member of Mankind Research Unlimited, Inc., a U.S. Navy and probably CIA funded group of scientists who studied electro-magnetic forms of disruption and mind control. In the article he poses the question of direct brain control through the use of low frequency waves when in fact, he was well-versed in the technology for years prior to writing the article.

16. Byrd, op. cit. pg.3

17. Bill Bise, A Magnetic Pacer - Environmental Electro-magnetic Counter Pollution Measure, (Pacific Northwest Center for the Study of Non-Ionizing Radiation, Inc., San Leandro, California) pg. 2

18. See Sources on ELF, ELF-Modulated Microwaves, and Microwaves as They Affect Living Systems, a data base of 1,600 references. (Planetary Association for Clean Energy, Ottawa, Canada, Spring, 1985) There is a 6,000 entry bibliography available on the same subject from the group, as well.

19. Robert C. Beck, Extremely Low Frequency Magnetic Fields and EEG Entrainment, Psychic Observer, Vol. XXXVIII, No. 2 (National Spiritual Science Center, Washington, D.C.) pg.144

Beck is also mentioned in Becker's book, op. cit., as a U.S. DOD consultant. See note 11, above.

20. Ibid. pg.140

21. Ibid. pg.137

22. Ibid. pg.137

In McAuliffe's article, op. cit., pg.42, she mentions that long wavelengths in roughly the same range as power line waves, at 1/50 the strength of the earth's magnetic field are the ones that Delgado used to produce profound behavioral effects.

23. Becker, op. cit. pg.324

24. Ibid. pg.324

25. McAuliffe, op. cit. pg.44

26. Beck, op. cit. pg.138 (note 19, above)

27. Ibid. pg.137

28. Ibid. pg.144

29. Becker, op. cit. pg.319

30. Bowart, op. cit., pg.15 (Vol.13, note 8, above)

See Becker, op. cit. pg.319, and Brodeur, op. cit. pg.295 for an account of a 1973 experiment by Dr. Joseph Sharp of Walter Reed Army Institute of Research, where Dr. Sharp was able to recognize spoken words delivered to him via a pulsed microwave transmission modulated as an audiogram.

31. Becker. op. cit. pg.319

32. Schapitz also prehypnotized some subjects into talking in their sleep so that the microwave programmer could gear commands to thoughts already in the brain.

33. Human Rights and Scientific and Technological Developments (United Nations, New York, 1982) pg.5 There are auditory surveillance devices based on projected microwaves. The same technology could also pulse EMR at behavior altering frequencies.

34. Initially, there was confusion over whether the reported microwave bombardment of the American Embassy in Moscow was to activate bugging devices or whether the composite of several frequencies was for some other purpose. Officials at the State Department said that the signal never amounted to more than 18 microwatts, significantly lower than the power densities allowed by the U.S. Shwann standard set for the general population. However, there was an unusually high number of illnesses among workers or residents of the compound. Embassy residents were found to have a white-blood-cell count 40% higher than normal; U.S. Ambassador Walter Stoessel was reported as telling his staff that the microwaves could cause leukemia, skin cancer, cataracts, and various forms of emotional illness. According to National Security Advisor Zbigniew