

US Electromagnetic Weapons and Human Rights

By Peter Phillips, Lew Brown and Bridget Thornton

As Study of the History of US Intelligence Community Human Rights Violations and Continuing Research in Electromagnetic Weapons

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This research explores the current capabilities of the US military to use electromagnetic (EMF) devices to harass, intimidate, and kill individuals and the continuing possibilities of violations of human rights by the testing and deployment of these weapons. To establish historical precedent in the US for such acts, we document long-term human rights and freedom of thought violations by US military/intelligence organizations. Additionally, we explore contemporary evidence of on-going government research in EMF weapons technologies and examine the potentialities of continuing human rights abuses.

In the 1950s and 60s the CIA began work to find means for influencing human cognition, emotion and behavior. Through the use of the psychological understanding of the human being as a social animal and the ability to manipulate a subject's environment through isolation, drugs and hypnosis, US funded scientists have long searched for better means of controlling human behavior. This research has included the use of wireless directed electromagnetic energy under the heading of "Information Warfare" and "Non Lethal Weapons." New technological capabilities have been developed in black budget projects¹ over the last few decades— including the ability to influence human emotion, disrupt thought, and present excruciating pain through the manipulation of magnetic fields. The US military and intelligence agencies have at their disposal frightful new weapons, weapons that have likely already been covertly used and/or tested on humans, both here and abroad, and which could be directed against the public in the event of mass protests or civil disturbance.

Human Rights belong to people collectively. To believe in rights for some and not others is a denial of the humanness of people worldwide. Yet, denial is exactly what Congress and George W. Bush did with the signing of the Military Commission Act of 2006. The new official US policy is that torture and suspension of due process are acceptable for anyone the president deems to be a terrorist or supporter. This act is the overt denial of the inalienable rights of human beings propagated in our Declaration of Independence and the Universal Declaration of Human Rights. More so, US actions declared to the world that the US suspends human rights for those it believes are evil.

The precious words, "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness," did not declare that only some men (and women) possess unalienable rights. Our independence was founded on the understanding that all men and women are recognized by this nation as having innate rights derived by their humanity.

Likewise, the Universal Declaration of Human Rights, created by the United Nations in 1948, signed and ratified by the US Congress, specifies in its preamble that "recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of

¹ Black budgets are government funded projects that are classified/secret to Congress and the American people. For an in-depth analysis on the topic, see Weiner, Tim, *Blank Check: The Pentagon's Black Budget*, Warner: 1990.

freedom, justice and peace in the world.”

The Universal Declaration of Human Rights has been a guide for international law for most of six decades, and as such binds the United States to its general principles. Article 10 states that “everyone is entitled to full equality, to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him,” and Article 5 specifically prohibits torture or cruel, inhuman or degrading treatment or punishment. Both of these basic human rights have been superceded by the passage the of Military Commissions Act of 2006.

Additionally, the Universal Declaration of Human rights declares that everyone has the right to freedom of thought and freedom of expression and opinion. This means that humans have the inalienable right to be able to freely think their own thoughts and discover their own truths. This paper addresses this most fundamental human right and explores the pending threats to individual freedom of thought posed by new EMF weapons technologies.

Freedom of thought or cognitive liberty is the natural human right of each person to be secure in their ability to perceive the world to the best of their ability. To have true cognitive liberty in a world as complex as ours would mean that first we must have access to truthful and unbiased information about the actions of others and the general state of the world. The Center for Cognitive Liberties defines this as “the right of each individual to think independently and autonomously, to use the full spectrum of his or her mind, and to engage in multiple modes of thought.”² Without accurate representations we cannot make independently informed choices. It is imperative that the human body and mind be considered sacrosanct. To invade a person’s body without their consent is an egregious human rights crime.

The circumstance may soon arrive in which anti-war or human rights protesters suddenly feel a burning sensation akin to touching a hot skillet over their entire body. Simultaneously they may hear terrifying nauseating screaming, which while not produced externally, fills their brains with overwhelming disruption. Not only are both phenomena currently possible, but designs for more powerful EMF technologies receive continuous funding from the US Government.

We are in a time of extremism, permanent war, and the unilateral manifestation of ethnocentrism and power by a cabal of people in the US government. These power elites have been in operation for decades and are set on nothing less than the total US military domination of the world. They defy the foundational values of the American people to achieve their ends. This is not a new phenomenon. The repression of human rights has been present within the US Government throughout our history.³

A long thread of sociological research documents the existence of a dominant ruling class in the US that sets policy and determines national political priorities. The American ruling class is complex and inter-competitive, maintaining itself through interacting families of high social standing with

² See the Center for Cognitive Liberty at <http://www.cognitiveliberty.org/>

³ For a full discussion on the Global Dominance Group currently operating in the US see: http://www.projectcensored.org/downloads/Global_Dominance_Group.pdf

similar life styles, corporate affiliations, and memberships in elite social clubs and private schools.⁴

This American ruling class is self-perpetuating,⁵ maintaining its influence through policy-making institutions such as the National Manufacturing Association, National Chamber of Commerce, Business Council, Business Roundtable, Conference Board, American Enterprise Institute, Council on Foreign Relations and other business-centered policy groups.⁶ C. Wright Mills, in his 1956 book *The Power Elite*, documents how World War II solidified a trinity of power in the US, comprised of corporate, military and government elites in a centralized power structure motivated by class interests and working in unison through "higher circles" of contact and agreement. Mills described how the power elite were those "who decide whatever is decided" of major consequence.⁷

With the advent of the military-industrial complex after World War II, President Eisenhower observed that an internal military industrial power faction was consolidating their long-term plans for the domination of America and, eventually, the world. Eisenhower was in no position to fight these men, and history records his feelings on the subject with the text of his short farewell address:

“...But threats, new in kind or degree, constantly arise. Of these, I mention two only...

...This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence – economic, political, even spiritual – is felt in every city, every Statehouse, every office of the Federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist.

We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and

⁴ G. William Domhoff, *Who Rules America?* (New York: McGraw Hill, 2006 [5th ed.] and Peter Phillips, *A Relative Advantage: Sociology of the San Francisco Bohemian Club*, 1994, (<http://library.sonoma.edu/regional/faculty/phillips/bohemianindex.html>)

⁵ Early studies by Charles Beard in the *Economic Interpretations of the Constitution of the United States* (1929), established that economic elites formulated the US Constitution to serve their own special interests. Henry Klien (1933) in his book *Dynastic America* claimed that wealth in America has power never before known in the world and was centered in the top 2% of the population owning some 60% of the country. Ferdinand Lundberg (1937) wrote *American's Sixty Families* documenting inter-marrying self-perpetuating families where wealth is the "indispensable handmaiden of government. C. Wright Mills determined in 1945 (American Business Elites, *Journal of Economic History*, Dec. 1945) that nine out of ten business elites from 1750 to 1879 came from well to do families.

⁶ See R. Brady, *Business as a System of Power*, (New York: Columbia University Press, 1943) and Val Burrell, *Elite Policy Planning Networks in the United State*, American Sociological Association paper 1991.

⁷ C. Wright Mills, *The Power Elite*, (New York: Oxford University Press, 1956).

knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades.

In this revolution, research has become central, it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.”⁸

We now understand that Eisenhower was referring to the conjunction of redirected tax monies to research secret new technology aimed at nothing less than increasing the controlling power of the military industrial elite to a global scale.

One particular faction of ambitious men, the former cold warriors and emerging neo-conservatives, were close followers of philosopher Leo Strauss. This elite group included not just generals and industrialists but philosophers, scientists, academics, and politicians have now become the most powerful public-private war organization ever known.

Strauss espoused an elitist philosophy that fawned over the characteristics of those who inherited wealth and lived lives of leisure to pursue whatever their interests may be. His ideas have been transformed into a cogent ideology in which the media, religion, and government are used to subdue the masses while the real “nobles” follow their own will without regard to the laws designed to control lesser men. Strauss was likewise fond of secrecy, as a necessity for control, because if the lesser men found out what was being done to them they would no doubt be upset.

“The people will not be happy to learn that there is only one natural right – the right of the superior to rule over the inferior, the master over the slave, the husband over the wife, and the wise few over the vulgar many.” In *On Tyranny*, Strauss refers to this natural right as the “tyrannical teaching” of his beloved ancients..⁹

Leo Strauss, Albert Wohlstetter, and others at the University of Chicago’s Committee on Social Thought receive wide credit for promoting the neo-conservative agenda through their students, Paul Wolfowitz, Allan Bloom, and Bloom's student Richard Perle.

Canadian cultural review magazine *Adbusters*, defines neo-conservatism as, "The belief that Democracy, however flawed, was best defended by an ignorant public pumped on nationalism and religion. Only a militantly nationalist state could deter human aggression ... such nationalism requires an external threat and if one cannot be found it must be manufactured."¹⁰

⁸ Public Papers of the Presidents, Dwight D. Eisenhower, 1960, p. 1035- 1040

⁹ Leo Strauss, “On Tyranny”, Edited by Victor Gourevitch and Michael S. Roth, University Of Chicago Press, 2000.

¹⁰ Guy Caron, “Anatomy of a Neo-Conservative White House,” *Canadian Dimension*, May 1, 2005.

The neo-conservative philosophy emerged as a reaction to the 1960s era of social revolutions. Numerous officials and associates in the Reagan and George H.W. Bush presidencies were strongly influenced by the neo-conservative philosophy including: John Ashcroft, Charles Fairbanks, Richard Cheney, Kenneth Adelman, Elliot Abrams, William Kristol and Douglas Feith.¹¹

Within the Ford administration there was a split between Cold War traditionalists seeking to minimize confrontations through diplomacy and detente and neo-conservatives advocating stronger confrontations with the Soviet's "Evil Empire." The latter group became more entrenched when George H.W. Bush became CIA Director. Bush allowed the formation of "Team B" headed by Richard Pipes along with Paul Wolfowitz, Lewis Libby, Paul Nitze and others, who formed the second Committee on the Present Danger to raise awareness of the Soviet threat and the continuing need for a strong aggressive defense policy. Their efforts led to strong anti-Soviet positioning during the Reagan administration.¹²

The Committees on the Present Danger (CPD) extend from the 1950s Russian threat to the present. The current CPD proudly boasts on their website;

“In times of great challenge to the security of the United States, Republicans, Democrats, and Independents have traditionally joined to make an assertive defense of American interests.

Twice before in American history, The Committee on the Present Danger has risen to this challenge. It emerged in 1950 as a bipartisan education and advocacy organization dedicated to building a national consensus for a strong defense against Soviet expansionism. In 1976, the Committee on the Present Danger reemerged, with leadership from the labor movement, bipartisan representatives of the foreign policy community and academia, all of whom were concerned about strategic drift in US security policy. With victory in the Cold War, the mission of the Committee on the Present Danger was considered complete and consequently was deactivated.

Today, the current CPD promotes radical Islamists as the primary threat to the American people and millions of others who prize liberty. They claim that the threat is global. They also claim that they operate from cells in a number of countries. Rogue regimes seek power by making common cause with terrorist groups. The prospect that this deadly collusion may include weapons of mass murder was the justification for the invasion of Iraq.”¹³

¹¹ Alain Frachon and Daniel Vernet, “The Strategist and the Philosopher: Leo Strauss and Albert Wihlestetter,” *Le Monde*, April 16, 2003, English translation: *Counterpunch* 6/2/03.

¹² Anne Hessing Cahn, Team B; The Trillion-dollar Experiment, *Bulletin of the Atomic Scientists*, April 1993, Volume 49, No. 03

¹³ The Committee on the Present Danger mission statement can be accessed at <http://www.fightingterror.org/whoweare/index.cfm>

Journalist John Pilger recalls his interview with neo-conservative Richard Perle during the Reagan administration: "I interviewed Perle when he was advising Reagan; and when he spoke about 'total war,' I mistakenly dismissed him as mad. He recently used the term again in describing America's 'war on terror', "No stages, This is total war. We are fighting a variety of enemies. There are lots of them out there. All this talk about first we are going to do Afghanistan, then we will do Iraq . . . this is entirely the wrong way to go about it. If we just let our vision of the world go forth, and we embrace it entirely and we don't try to piece together clever diplomacy, but just wage a total war . . . our children will sing great songs about us years from now."¹⁴

There is ample evidence available to show that some individuals within government and industry have little problem with violating the public trust and using their positions to kill, maim, torture and destroy. It is of the utmost importance to our traditional American values of human rights and cognitive liberty that we recognize this threat from within. We must move to identify those who show these proclivities and ensure that their activities have adequate oversight.

Stanley Milgram's famous experiment involving obedience to authority proved that individuals are fairly easily cowed into submitting to anyone who has a claim of authority, and that on average 61 percent of people will administer pain to another person if instructed to do so.¹⁵ Both test groups in these experiments rationalized their behavior by appealing to "the greater good." Because it was for the "advancement of science" they were able to be convinced they should ignore personal judgment and obey the instructions given to them by the experimenters.¹⁶

Martin Orne, who was one of those paid by the CIA to conduct experiments on obedience, showed in 1962 that people would go to tremendous lengths to please a person in authority. Orne conducted research that involved presenting subjects with a stack of 2,000 pages of random numbers and instructing them to add each two adjacent numbers until he returned. Over 90 percent of the test subjects continued in this meaningless task for up to five hours.¹⁷

Today the combination of political climate and technological capability presents a condition in which widespread manipulation of, not only the flow of information through the media, but also the manipulation of the emotional states and cognitive ability in large populations could be achieved. If policy elites are unaccountable to the public for their actions, and the public has been emotionally manipulated to support them, we can assume that they will certainly abuse their positions in the pursuit of their agendas.

¹⁴ John Pilger, "The World Will Know The Truth," *New Statesman* (London) (December 16 2002).

¹⁵ Stanley Milgram "Obedience to Authority: An Experimental View", New York: HarperCollins, 2004.

¹⁶ "Obedience as a determinant of behavior is of particular relevance to our time," Behavioral Study of Obedience, Stanley Milgram, Yale University, *Journal of Abnormal and Social Psychology*, Vol. 67, No. 4, p. 371

¹⁷ See Martin Orne-Orne, Martin T., "On The Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications," *Am. Psychol.* 17 (1962): 776-783, Orne, M.T. The potential uses of hypnosis in interrogation. In A.D. Biderman (Ed.), *The Manipulation of Human Behavior* (pp. 169-215). New York: John Wiley & Sons, 1961

Previous human rights and cognitive liberty violations are evidenced in CIA and FBI records pertaining to the infamous MK-ULTRA project and the grim record of harassment and subversion uncovered in the COINTELPRO program in force through the 1950s and into the 1970s. We also examined some of the cases of illegal experimentation on the public dating back to the 1930s. We consider, in depth, the forms of electromagnetic weapons entering the battlefield today that trace their origins back through the secret projects of the Defense Department in the 1950s and 1960s.

Psychological Warfare, Information War, and mind control may seem to be exotic topics, but the impact of these technologies and techniques is profound. Our minds are being impacted through a longstanding series of programs aimed at manipulating public opinion through intelligence agencies, think tanks, corporate media and a host of non-governmental organizations designed to engender fear, division and uncertainty in the public.¹⁸ Media manipulation involving the artificial framing of our collective reality is often a hit or miss proposition, but psychological operations have been carried out in the past, and are being carried out even today, through the practices of “Information Warfare,” directed at enemies abroad and at the American people.¹⁹

According to Mary C. FitzGerald of the Hudson Institute, New-concept weapons, such as laser, electromagnetic, plasma, climatic, genetic and biotechnological are the central principle driving the modernization of national defense. The potential for these weapons to be used for both good and bad deserves a great deal of attention, but there is little to be found in the media or discussed by our administration.²⁰

The US is a system of many institutions including those whose sole function is to provide government oversight. When problems arise that threaten the stability of the country or the safety of the people, the US government is designed to have checks and balances that allow the people to challenge misconduct either directly or through congressional representatives. Increasingly, oversight is disintegrating. According to a 2006 report in the *Boston Globe*, the intelligence committee does not read most intelligence reports in their entirety.²¹

The media is complicit in omitting information necessary to make democratic decisions.²² A global dominance agenda includes penetration into the boardrooms of the corporate media in the US. A research team at Sonoma State University recently finished conducting a network analysis of the

¹⁸ For an analysis on the interlocking of the corporate media, think tanks and government organizations, see Peter Phillips, Bridget Thornton and Lew Brown “The Global Dominance Group and the US Corporate Media” in *Censored 2007*, Seven Stories Press.

¹⁹ See: Snow, Nancy, *Information War American Propaganda, Free Speech, and Opinion Control Since 9/11*, 2004 Seven Stories Press and Chomsky, Noam *Media Control: The Spectacular Achievements of Propaganda*, 2002 Seven Stories Press

²⁰ In researching this article, there are no instances of remarks by senior White House, Pentagon, or Congressional officials that specifically address the human effects of non-lethal EMF weapons. A search in Lexis Nexis from 2001-2006 returned no results in American mainstream media.

²¹ Classified Intelligence Bills Often Are Unread: Secret Process Can Discourage House Debate, Susan Milligan, *Boston Globe* August 6, 2006.

²² The Global Dominance Group and the US Corporate media, by Peter Phillips, Bridget Thornton and Lew Brown, published in *Censored 2007*, Seven Stories Press, 2006, Chapter 10,

boards of directors of the ten big media organizations in the US. The team determined that only 118 people comprise the membership on the boards of director of the ten big media giants. These 118 individuals in turn sit on the corporate boards of 288 national and international corporations. Four of the top 10 media corporations in the US have DOD contractors on their boards of directors including:

William Kennard: New York Times, Carlyle Group
Douglas Warner III, GE (NBC), Bechtel
John Bryson: Disney (ABC), Boeing
Alwyn Lewis: Disney (ABC), Halliburton
Douglas McCorkindale: Gannett, Lockheed-Martin

Given an interlocked media network, big media in the US effectively represent corporate America's interests. The media elite, a key component of policy elites in the US, are the watchdogs of acceptable ideological messages, the controllers of news and information content, and the decision makers regarding media resources

It is not suggested that everyone in the government believes in global domination, nor that it is the intent of every government official to 'cover up' misconduct.²³ Scientists involved in potentially harmful technology are not 'mad scientists.' In fact, there are many reports in the public sphere addressing government and military misconduct that are put forth by people within these very institutions. The problem is when the government threatens whistleblowers, intimidates officials with job loss, infiltrates activist organizations, and increases surveillance²⁴.

PSYCHOLOGICAL WAR

Modern Psychological Operations (Psy-Ops) were significantly advanced in the Second World War²⁵ and were brought to bear on the American public during the 1950s with the formation of a widespread network of social scientists, journalists, politicians, military specialists and intelligence operatives. Psy-Ops were used to promote a variety of programs in cooperation with the Industrial Military Complex. Their key piece of information warfare was the Communist Red Menace.²⁶

²³ Remarks on Classification, The Hon. Lee Hamilton, Information Security Oversight Office, October 18, 2005. "At a time when the US intelligence community is under intense scrutiny in the aftermath of 9/11 and the failure to find weapons of mass destruction in Iraq, we only increase public skepticism about our government by denying the public information."

²⁴ See: Valerie Plame, the Richard Leiby, Spy Who Got Shoved Out Into the Cold, *Washington Post*, October 29, 2005; Page C01; Amended 2006 surveillance bill by Bush; The FBI and the Engineering of Consent, Noam Chomsky, From *Public Eye Magazine*, Volume One, Number Two; and Demian Bulwa, Oakland: Police spies chosen to lead war protest, *San Francisco Chronicle*, Friday, July 28, 2006.

²⁵ See William E. Daugherty and Morris Janowitz, *A Psychological Warfare Casebook*, Baltimore, MD: Johns Hopkins University Press, 1958. In particular, see Daugherty's article on "US Psychological Warfare Organizations in World War II," pp. 126-136.

²⁶ For a current view of these kinds of operations and how they are outsourced see James Bamford's article in the *Rolling Stone*, The Man Who Sold the War Meet John Rendon, Bush's General In The Propaganda War, November 17, 2005. For more information on CIA control of the media refer to Carl Bernstein, "The CIA and the Media -- How America's

One of the opening salvos in this war of deception was fired by George Kennan, the American ambassador to Moscow, describing the Soviet threat in a “long cable” sent to Washington in 1946. Kennan spent decades studying the Russian political scene. He became convinced that there would be little chance of cooperation with the Soviets and recommended a number of actions, most notably the institution of “political war” through the newly formed CIA - a decision he later regretted, even arguing for the elimination of the CIA in 1997.²⁷

In the late 1950s, a right-wing cadre of men within the new CIA was busy building secret armies, planning assassinations, and generally devising plans for world domination that still play out today. Operation Gladio was one example, well documented and international in scope, in which right-wing members of the US intelligence community created “stay-behind” armies in many of the nations of Europe. Those armies managed to infiltrate the highest levels of politics (most notably in Italy where the term “Gladio” refers to a double edged sword) and have been held responsible for numerous false-flag terrorist acts through the 1980s and 1990s. Terror and propaganda often go hand-in-hand in the extremist elements within our military and intelligence communities.²⁸

To counter the divisions within the intelligence community, a greater voice was given to organizations formal and informal. In the 1950s, one such group, the first Committee on the Present Danger (CPD), promulgated a series of “gap crises.” The Bomber Gap, the Missile Gap, the Space Gap, and the Brainwashing and Psychotronic Gap were used to justify increased military technology spending. Congress was led to believe that the Soviets were a much greater threat than they actually were, and that a terrifying new weapon was being developed that threatened America. They were thus convinced to vote for virtually any black budget proposal that came their way. The CPD ran a series of broadcasts to the public through the Mutual Broadcasting Network that spread fear in the minds of the public.

Under the first civilian CIA Director, Allen Welsh Dulles, the Company began to push forward with its agenda of manufacturing consent from the American people for a new state of perpetual war industrialization. Dulles was a well-connected individual, a successful spy for the OSS in Switzerland during the war, related to three secretaries of state, and the chief advisor to Dewey when he ran for President in 1948. Dulles had access to the highest echelons of policy making and his

Most Powerful News Media Worked Hand in Glove with the Central Intelligence Agency and Why the Church Committee Covered It Up”, *Rolling Stone*, October 20, 1977, p.63.-the title of the original operation was “Mockingbird”

²⁷ George F. Kennan. “Spy and Counterspy.” *The New York Times*, May 18, 1997. For a sympathetic biography see George F. Kennan and *The Making of American Foreign Policy, 1947-1950*, Wilson D. Miscamble, C.S.C, 1993 Princeton University Press. George F. Kennan. “Policy Planning Staff memorandum on the inauguration of organized political warfare”, May 4, 1948. Published in *Foreign Relations of the United States, 1945-1950: Emergence of the Intelligence Establishment*. Discusses the need for political warfare: that is, measures short of war, such as propaganda and covert operations.

²⁸ History News Network, USA 13 June 2005, *Terrorism in Western Europe: An Approach to NATO’s Secret Stay-Behind Armies*, by Daniele Ganser, *The Whitehead Journal of Diplomacy and International Relations* 1 June 2005, Kennan published his analysis anonymously in *Foreign Affairs*, the official magazine of the Council for Foreign Relations (CFR). [Mr. X (Alias ‘George C. Kennan): “The Sources of Soviet Conduct”, in *Foreign Affairs*, July 1947.] (http://www.isn.ethz.ch/php/documents/collection_gladio/Terrorism_Western_Europe.pdf)

influence was global in scope, counting among his close friends Henry Luce, publisher of *Newsweek*. Relying heavily upon established circles of contacts within the nation's media elites, Dulles recruited key members of the media to work directly for the CIA under Operation Mockingbird. Mockingbird was a psychological information campaign against the American people. In a campaign that would lead to acceptance of blanket secrecy for "national security", "the Red Scare" became the excuse for spending vast sums of money on weapon systems and an increase in covert operations both in foreign countries and within the United States. In the 1950s and 1960s, movies, news articles, books, radio and television programs were carefully laced with anti-communist messages and images designed to produce an acceptance of the policies being promoted by the defense elite's propaganda machine.²⁹

"Among the executives who lent their cooperation to the Agency were William Paley of the Columbia Broadcasting System, Henry Luce of Time Inc., Arthur Hays Sulzberger of the *New York Times*, Barry Bingham Sr. of the *Louisville Courier-Journal* and James Copley of the Copley News Service. Other organizations which cooperated with the CIA include the American Broadcasting Company, the National Broadcasting Company, the Associated Press, United Press International, Reuters, Hearst Newspapers, Scripps-Howard, *Newsweek* magazine, the Mutual Broadcasting System, *The Miami Herald*, and the old *Saturday Evening Post* and *New York Herald-Tribune*. By far the most valuable of these associations, according to CIA officials, have been with *The New York Times*, CBS, and Time Inc."³⁰

One of the engineers of this deception was a former head of the stay-behind network, Edward W. Barrett, director of the Interdepartmental Psychological Strategy Board (IPSB) and, not coincidentally an editor at *Newsweek*. Barrett was seen as being very effective in his efforts to manipulate public opinion. At the same time, CPD was a "non-political group of citizens of the western coast" and launched a media campaign in favor of the urgent reinforcement of the national defense. Among the organizers of the Committee were Frank Altschul (Director of the Council for Foreign Relations), William Donovan (former head of the OSS during WWII) and General Dwight D. Eisenhower.³¹

All of this activity was more than enough to stoke the fears of the public and encourage policy makers to accept the Cold War view of the world. This allowed Truman to convince Congress to approve a tripled military budget that provided funding for secret research and development and turn a blind eye (in the name of National Security) to "black operations" programs authorized under the new Cold War rubric of "containment" and aimed at undermining otherwise peaceful nations and

²⁹ Victor Marchetti and John D. Marks, *The CIA and The Cult of Intelligence*, Dell Books, 1975 (as a matter of general interest this is reportedly the first book the Government went to court to have censored. There are 168 missing pages as a result of the courts ruling but the spaces were retained in the first edition.)

³⁰ "The CIA and the Media", Carl Bernstein *Rolling Stone*, Oct. 20, 1977

³¹ David F. Krugler, Will It Play in Peoria? The 1950 Campaign of Truth and the Reconstruction of Cold War Propaganda, British Association of American Studies Annual Conference April 1997 University of Birmingham, Birmingham, England

fomenting war, torture and assassination in countries as diverse as Iran, Guatemala and Indochina.³²

Post-war developments in Europe, especially the British withdrawal from Greece, led Truman to decide it was necessary to have a permanent American presence in the old continent to counteract the Communist influence.³³ General George C. Marshall, Secretary of State, designed a vast plan that mixed economic assistance and secret actions aimed at establishing democracies and making sure that voters in foreign countries made “the right choice.” National Security Council directive NSC 10/2, essentially written by Kennan, made official the creation of an anti-Communist interference network.³⁴

The US intelligence community had an ace in the hole, Reinhardt Gehlen, a Nazi spymaster with an existing network of agents became the front man in Eastern Europe for American intelligence. General Reinhardt Gehlen proved to be troublesome for the CIA over the years. Communist counter-spies infiltrated his network, his information was often incorrect, and he had downplayed his eagerness to serve the Reich. But Gehlen was only one of thousands of Nazis recruited to assist in the new “Cold War” through Operation Paperclip.³⁵ In fact, the intelligence assets acquired by bringing the Gestapo onto the US public payroll was overshadowed by the acquisition of dozens of brilliant Nazi scientists and researchers.

At this juncture, Truman, through the application of the 1947 National Security Act and the newly formed National Security Council³⁶, authorized a vast number of secret projects involving chemical, biological, nuclear and electromagnetic experiments. Former Nazis were put in charge of many of the most sensitive programs and facilities. The Army Ballistic Missile Agency (ABMA) was entrusted to the former SS officer Wernher von Braun.³⁷ Kurt Debus, another ex-SS officer, directed Cape Canaveral. At this time scientists began working on “black” projects in earnest, including attempts at finally developing the “lost” theories of Nicola Tesla, the Serbian-born American physicist, into military and intelligence applications.³⁸

TESLA AND EMF

³² William Blum, *Killing Hope: US Military and CIA Interventions Since World War II*, Monroe, Maine: Common Courage Press, 1995; Ralph McGehee, *Deadly Deceits: My 25 years in the CIA*, New York: Sheridan Square Publications, 1983. [http://www.sourcewatch.org/index.php?title=CIA Footnote on Ops](http://www.sourcewatch.org/index.php?title=CIA+Footnote+on+Ops)

³³ Daniele Ganser, *NATO's Secret Armies. Operation Gladio and Terrorism in Western Europe*, Frank Cass Publishers, 2004.

³⁴ See the Federation of American Scientists Intelligence resource program, National Security Council [NSC] Truman Administration [1947-1953] at <http://www.fas.org/irp/offdocs/nsc-hst/index.html>.

³⁵ Linda Hunt, *Secret Agenda: The United States Government, Nazi Scientists and Project Paperclip, 1945-1990*, St. Martin's Press, 1991.

³⁶ The National Security Act of 1947 can be accessed at <http://www.state.gov/r/pa/ho/time/cwr/17603.htm>

³⁷ Biography of Werner VonBraun produced by NASA: [ww.hq.nasa.gov/office/pao/History/sputnik/braun.html](http://www.hq.nasa.gov/office/pao/History/sputnik/braun.html) and at the Marshall Space Flight Center located at <http://history.msfc.nasa.gov/vonbraun/index.html>

³⁸ Hunt, L. *Secret Agenda. The United States Government, Nazi Scientists, and Project Paperclip, 1945 to 1990*. New York: St. Martin's Press, 1991. Simpson, C. “Blowback. The First Full Account of America's Recruitment of Nazis, and the Disastrous Effect on Our Domestic and Foreign Policy”. New York: Weidenfeld and Nicolson, 1988

Military interest into the weaponization of the electromagnetic spectrum has a long history, based on the theoretical work of Nikola Tesla. Radar, in its early inception, was seen not only as a means of tracking the position and speed of enemy targets, but as a potential weapon in its own right. There are very real problems however with overcoming the normal decrease in effect of an electromagnetic field over distance. This effect is a natural function of the laws of physics and applies to both electrical and magnetic fields³⁹. In short, the strength of a field drops off in inverse proportion to the distance of the target from the source. Without a means of concentrating and directing a beam of energy across long distances, any effect that an EMF weapon may have would be limited to its immediate vicinity. From 1900 until his death in 1943, Nikola Tesla worked to develop just such a weapon.

In a letter to the *New York Times* editor in 1908 Tesla wrote,

“When I spoke of future warfare I meant that it should be conducted by direct application of electrical waves without the use of aerial engines or other implements of destruction...What I said in regard to the greatest achievement of the man of science whose mind is bent upon the mastery of the physical universe, was nothing more than what I stated in one of my unpublished addresses, from which I quote: "According to an adopted theory, every ponderable atom is differentiated from a tenuous fluid, filling all space merely by spinning motion, as a whirl of water in a calm lake. By being set in movement this fluid, the ether, becomes gross matter. Its movement arrested, the primary substance reverts to its normal state. It appears, then, possible for man through harnessed energy of the medium and suitable agencies for starting and stopping ether whirls to cause matter to form and disappear. At his command, almost without effort on his part, old worlds would vanish and new ones would spring into being. He could alter the size of this planet, control its seasons, adjust its distance from the sun, guide it on its eternal journey along any path he might choose, through the depths of the universe. He could make planets collide and produce his suns and stars, his heat and light; he could originate life in all its infinite forms. To cause at will the birth and death of matter would be man's grandest deed, which would give him the mastery of physical creation, make him fulfill his ultimate destiny."⁴⁰

Tesla made several claims during the latter years of his life, published by the *New York Times* in what became an annual event. His theory of the hidden nature of our universe supplants those of many of his contemporaries in that he was able to infer a multidimensional model of the universe that is only now being investigated through the theoretical mathematics of our leading physicists.⁴¹

³⁹ There are two laws of note here: the inverse square law, which relates to forces such as gravity, and the inverse cube law, which relates to electromagnetic forces. Both equations describe the relationship between the power of the force and the decrease in that forces effect over distance. In regards to magnetism we refer to the work of Maxwell. One easily accessible online source for his equations is: <http://www.rialian.com/rnboyd/maxwell.htm> A good place to start for understanding the man and his work is the James Clerk Maxwell Foundation at:

<http://www.clerkmaxwellfoundation.org/html/links.html>

⁴⁰ *New York Times*, April 21st, 1908 (p.5 column 6) Tesla Letter to the Editor .

⁴¹ "The Cosmic Triangle: Revealing the State of the Universe," in the May 28, 1999 issue of the journal *Science*

Tesla also developed means of remotely controlling aircraft as early as 1915, foreshadowing the Unmanned Ariel Vehicles (UAVs) of today's battlefields. In 1934 Tesla offers to build a "Death Ray" that would make the power of an opponents air force obsolete. This was one of the earliest recorded statements regarding directed energy weapons.⁴² Tesla's offer to build this device for the US government for a bargain price, but with many caveats, was refused by officials who, preferred instead to pump money into the new Army Air Corp, which in turn gave rise to the military aviation complex that we have today.⁴³

Before the war the airline industry was not a major part of the economic life of the nation.⁴⁴ With huge wartime contracts, however, corporations such as Hughes, McDonnell Douglas, Lockheed, and Northrop quickly grew in power commensurate with the financial bonanza that was unearthed in the battlefields of Europe and the Pacific.⁴⁵ These companies formed the core of the "military-industrial complex." Their investors and managers began to consolidate their clout in political circles to keep the nation on a wartime economic footing, a simple and vastly powerful weapon that would make aircraft, bombs, missiles and attendant industries irrelevant would certainly be seen as a direct threat to the growing power of military arsenal. Instead, a "black budget" program was put into motion, which exploited the work of Robert Oppenheimer, Albert Einstein and others. The Manhattan Project, developed by the DOD in 1942, generated a vastly destructive weapon that required a well-established and unbelievably expensive aerospace industry, along with unprecedented levels of secrecy and autonomy from Congress and the public.⁴⁶

The US government also ignored Tesla's offer to produce a "city killing machine," which was composed of an electromagnetic shield and a wireless torpedo. Tesla made several proposals during the 1930s, none of which received funding. Among Tesla's claims, published annually on his birthday in the *New York Times*, were methods of harnessing the power of the sun to electrify the earth and provide free electrical power to anybody, anywhere.

Tesla did, however, conceive of at least one device that became a major part of our nation's arsenal -

discusses Dark Energy and Margaret Cheney, *Tesla: A Man Out of Time*, Dell Publishing, 1983.

⁴² Front page *New York Times*, July 11 1934 was entitled, "TESLA, AT 78, BARES NEW 'DEATH BEAM'" and told of the inventor's proposal that would "send concentrated beams of particles through the free air, of such tremendous energy that they will bring down a fleet of 10,000 enemy airplanes at a distance of 250 miles..."

⁴³ To illustrate the control of science for corporate profit, Tesla's practical applications all shared one thing in common, they were devoid of any profitable application. As a result, Tesla's development of wireless electricity has never borne fruit, leaving us still in the 21st century surrounded by a landscape of transmission wires, faulty electrical grids, destructive (though profitable) electrical generation systems, wars for oil, and a suffering environment. See Marc J. Seifer, *The Life and Times of Nikola Tesla*, Citadel Press, 1998.

⁴⁴ John B. Rae, *Climb to Greatness: The American Aircraft Industry, 1920-1960*, Cambridge: MIT Press, 1968. Roger E. Bilstein, *The American Aerospace Industry: From Workshop to Global Enterprise*, New York: Twayne Publishers, 1996.

⁴⁵ Carol L. Cook, *The Aerospace Industry: Its History and How it Affects the US Economy*, Yale-New Haven Teachers Institute, 2005.

⁴⁶ See the National Atomic Museum's archives concerning the Manhattan Project at <http://www.atomicmuseum.com/tour/manhattanproject.cfm> and the Brookings Institute's archives at <http://www.brook.edu/FP/PROJECTS/NUCW/COST/MANHATTN.HTM>

radar. As early as 1917 he published his theory and developed the first prototype in 1934. It is from the basis of this technology that future research into weaponizing the electromagnetic spectrum proceeded. At the same time Tesla was working on methods of transmitting and receiving communication signals through interplanetary space and reading the images on a sleeping person's retina (by extension mind reading). His prediction that future wars would be fought with electromagnetic means foreshadowed the rise of electronic warfare and the non-lethal weapons technology being deployed today.⁴⁷

At first glance, it would seem probable that the military had taken over the management of Tesla's material. In fact, a number of projects related to his life's work were in development. For instance, the building of beam weapons at Wright Patterson Air Force Base under the code name "Project Nick"⁴⁸ headed by Brigadier General L.C. Craigie. This project was however, cancelled due to an apparent lack of understanding of Tesla's means of transmitting high-energy waves without a loss of power over great distances. Defense Advanced Research Projects Agency (DARPA) began another project in 1958 codenamed "Seesaw" at Lawrence Livermore Labs⁴⁹ aimed at combating reported Soviet advances in electromagnetic weapons and defenses, advances that many believe came about after 1952 when the bulk of Tesla's research and personal effects were turned over to his nephew, Sava Kosanovic, who promptly whisked them away to Yugoslavia. Eight years later Soviet Premier Nikita Khrushchev would state that, "A new and fantastic weapon is in the hatching stage,"⁵⁰ horrifying many and prompting calls for more effective means of using EMF, espionage and counter-espionage.

On February 9, 1981, the office of the Undersecretary of Defense Research and Engineering department sent a letter to the FBI that requested the papers of Tesla, stating, "We believe that certain of Tesla's papers may contain basic principles which would be of considerable value to certain ongoing research within the DOD. It would be very helpful to have access to these papers. The letter was signed by Lt. Col. Allan J. McLaren, an R.O.T.C. graduate from M.I.T. in 1960, who later went on to become a project director with Lockheed Martin Space Systems from which he retired in 2003."⁵¹

This section of his memo to the FBI was not declassified until 1993. In response, the FBI issued the same response as to all of the other inquiries with one exception, this time they identified who it was that examined the stored effects; it was the Office of Scientific Research and Development from

⁴⁷ *New York Times*, 1937 "...will send concentrated beams of particles through the free air, of such tremendous energy that they will bring down a fleet of 10,000 enemy airplanes at a distance of 250 miles from the defending nation's border and will cause armies of millions to drop dead in their tracks When put into operation, Dr. Tesla said, this latest invention of his would make war impossible. This death-beam, he asserted, would surround each country like an invisible Chinese wall, only a million times more impenetrable. It would make every nation impregnable against attack by airplanes or by large invading armies." For an interesting article about Tesla's "Death Ray" and the relationship to Tunguska see: <http://www.viewzone.com/tesla.ray.html>)

⁴⁸ Tesla: Master of Lightning, archived at PBS: www.pbs.org/tesla/11/11_mispapers.html

⁴⁹ Tesla: Life and Legacy, Missing Papers, archived at PBS: http://www.pbs.org/tesla/11/11_mispapers.html.

⁵⁰ Max Frankel, "Khrushchev Says Soviets Will Cut Forces a Third; Sees 'Fantastic Weapon', *New York Times*, January 15, 1960.

⁵¹ See Tesla's FBI files at the FBI FOIA site located at <http://foia.fbi.gov/foiaindex/tesla.htm>.

MIT, a breeding ground of CIA. technical types the Office of Naval Intelligence and agents from US Naval Research.⁵² What they may have been looking for had likely already been taken, according to a recent PBS special entitled *Tesla: Life and Legacy*, Tesla's nephew reported that Tesla's most recent journal was missing from the bulk of material stored by the OAP.⁵³ In recent years high profile projects such as the High Altitude Auroral Project ("HAARP"), the Strategic Defense Initiative ("Star Wars"), and many of the devices promoted by proponents of "Non-Lethal Weapons" have Tesla's intellectual fingerprints all over them.⁵⁴

MK-ULTRA

In terms of mind-control and the breaking down of prisoners for military interrogations, the events at Abu-Ghraib, Guantanamo, and in the CIA network of secret prisons dotting the globe, all have their intellectual origin in the work carried out by a network of scientists under the behest of the intelligence community beginning in the World War II period. Mind-control, per se, refers to a well-funded, broad based series of programs designed to explore the furthest reaches of human cognitive ability. The Nazis, as well as the Japanese, had been experimenting on prisoners throughout the war. Recovery of the records of these experiments led the US to proceed with investigations into new means of interrogations and the building of resistance to interrogations of US personnel.⁵⁵

The CIA, in association with various other agencies, undertook a long series of experiments on unsuspecting prisoners, students, military personnel and others recruited into one of the at least 162 subprojects of what became known as MKULTRA.⁵⁶ Interest was certainly piqued by the case of Cardinal Mindszenty and the reports of brainwashing techniques used on American soldiers in prisoner of war camps in Korea⁵⁷. But even prior to the Korean War the resiliency of the human mind was being tested by researchers on the black budget. These projects reportedly at times violated every conceivable notion of human rights and dignity.⁵⁸

Frank Olson, a mid-level CIA operative, worked on the development of aerosol delivery of drugs and poisons at Ft. Detrick, Maryland. His work, which is still classified, was funded through MKULTRA. Olson took a trip to England where MI6 and the CIA were working together on ways to

⁵² Tesla: Life and Legacy, Missing Papers, archived at PBS: http://www.pbs.org/tesla/ll/ll_mispapers.html.

⁵³ Tesla: Master of Lightning PBS documentary Dec. 12th, 2000.

⁵⁴ Box#8 of Declassified CIA documents pertaining to MKULTRA contains the following fragment: The Application of Tesla's Technology in Today's World. Obtain, online, through the National Security Archives at <http://www.gwu.edu/~nsarchiv/>

⁵⁵ Harris, S. (1994) *Factories Of Death: Japanese Biological Warfare, 1932-45, And The American Cover-Up*. London: Routledge. Tanaka, Y. 1998. *Hidden Horrors: Japanese War Crimes in World War II*. Boulder, Colorado: Westview Press, Michalczyk, J. J. 1994. *Medicine, ethics, and the Third Reich: Historical and Contemporary Issues* (METR). Kansas City, Missouri: Sheed & Ward

⁵⁶ This site provides a selection of memorandum from within the CIA, in which funding is discussed.

<http://cryptome.org/mkultra-0003.htm> Digital MK-Ultra files can be found at: <http://www.intellnet.org/mkultra/general> note about MK-ULTRA funding)

⁵⁷ Stephen Budiansky, Erica E. Goode and Ted Gest, "The Cold War Experiments", *U.S News and World Report* January 24, 1994.

⁵⁸ Patricia Greenfield, CIA's Behavior Caper, *APA Monitor*, December 1977, pp. 1, 10-11

prevent allied spies and servicemen from yielding to interrogation. Olson also traveled to Frankfurt, where the two agencies conducted fatal experiments on prisoners of war and others considered to be “expendable.” Olson had an ethical dilemma with the research and, after voicing his concerns, returned to the United States. On November 28, 1953, Olson was in room 1018A of the Hotel Statler in New York. At 2 a.m., Olson fell from the 10th floor window of his room to his death on the sidewalk below. The headline reported his death as an accident or suicide. This report was discredited when, in 1975, another official lie was issued to ease his family’s suffering and deflect public scrutiny. This time Olson was called the victim of an LSD experiment.⁵⁹ Media reports cited in the *New York Times* focused on the sensational aspects of LSD use and psychic warfare, but did not dwell on the more egregious violations of human rights and dignity inherent in the programs overseen by the CIA.⁶⁰

The truth was not revealed until 1994 when his son finally had his body exhumed and examined. The autopsy showed that Olson’s left temple had been fractured before he fell. According to the *New York Times Magazine* CIA tradecraft books from 1953, that have since been released teach that “one of the surest methods of killing somebody without a trace involves impairing their reflexes with alcohol (or drugs) and then stepping up behind them and stunning them with a blow to the temple. After that you quickly grab their ankles and in a single motion flip them over a bridge, balcony or out of a window more than 70 feet off of the ground.”⁶¹ What Olson saw, and what cost him his life and his family their peace of mind for 30 years, was the beginning of a long term strategy to develop means of making individual both resistant to “brainwashing” and to control the actions of individuals.⁶² The cover story that was used to justify the beginning of the project was that there was a “brainwashing gap” with the Koreans.⁶³

Experimenters used college students, servicemen, mental patients, the poor and, in several instances, children as young as four years old, in attempts to create untraceable assassins, couriers and other operatives. MKULTRA sub-projects involved the services of many notable universities and used a number of false front corporations such as the Foundation for the Study of Human Ecology and think tanks such as RAND, to shield the source of funding from those with ethical “problems.”⁶⁴ We would still know nothing of these activities had it not been for the release of 16,000 pages of documents in 1977 through the FOIA request filed by the surviving family of Frank Olson. Unfortunately CIA Director Richard Helms ordered the destruction of any MKULTRA records

⁵⁹ Thomas O’Toole, “CIA Infiltrated 17 Area Groups, Gave out LSD Suicide Revealed”, front-page story *Washington Post*, June 11, 1975.

⁶⁰ Carl Bernstein, “The CIA and the Media: How Americas Most Powerful News Media Worked Hand in Glove with the Central Intelligence Agency and Why the Church Committee Covered It Up”, *Rolling Stone*, October 20, 1977.

⁶¹ Michael Ignatieff, “What did the C.I.A. Do to Eric Olson's Father?” *New York Times Magazine*, April 1, 2001.

⁶² *ibid.* and The Frank Olson Project at

<http://www.frankolsonproject.org/Contents.html><http://www.frankolsonproject.org/Statements/FamilyStatement2002.htm>
1. Dr. Eric Olson continues to do what he can to bring to light the truth of his father’s death. At the above website there are memorandum written by Dick Cheney to Donald Rumsfeld in regards to the families lawsuit during the Ford administration in 1975

⁶³ Reported in the *New York Times* as “Mind Control Studies had Origin in Trial of Mindszenty”, Aug. 2, 1977, p.16.

⁶⁴ See Athan G. Theoharis, “Researching the Intelligence Agencies: The Problem of Covert Activities”, *The Public Historian*, 1984 National Council on Public History, University of California Press.

shortly before the order came in to his office⁶⁵, leaving an incomplete picture of a concerted effort by various agencies to create new and better means of controlling the thoughts, emotions and thus behavior, of unsuspecting individuals.

ILLEGAL EXPERIMENTATION

MKULTRA was, however, neither the first nor the last project funded by government or industry to experiment on people in the name of some greater good. A quick review of the history of secret experimentation and medical atrocities reveals a pattern of deadly behavior

The Tuskegee Experiments in 1932 cruelly condemned scores of black men to death from syphilis.⁶⁶

The Pellagra Incident, in which millions died over two decades, in spite of the fact that the US Public Health Service knew at the time that these deaths were caused by little more than a niacin deficiency.⁶⁷

In 1940 scientists exposed four-hundred prisoners in Chicago with malaria (a US experiment Nazis cited at the Nuremberg trials to defend their own experimentation).⁶⁸

During WWII, Seventh Day Adventist conscientious objectors were enlisted into Operation Whitecoat by the US Army and the Adventist Church. They were told that they were being tested for defensive research purposes while the government was in fact testing offensive chemical and biological weapons.⁶⁹

After WWII, matters became far worse for those who were caught up in the web of illegal scientific testing. In 1947 Colonel E.E. Kirkpatrick of the US Atomic Energy Commission issued a secret document stating that the agency would begin administering intravenous doses of radioactive substances to human subjects. At the same time atomic tests in which the residents of Utah and Nevada were purposely exposed to radioactive fallout. There were also a series of operations during the 1940s and 1950s in which US cities were attacked secretly by the military through the spread of biological agents in order to track their propagation through a real population.⁷⁰

⁶⁵ Project MKULTRA, The CIA's Program of Research in Behavioral Modification, August 3, 1977, US Senate, Select Committee on Intelligence, and Subcommittee on Health and Scientific Research of the Committee on Human Resources.

⁶⁶ Jean Heller (Associated Press), "Syphilis Victims in the US Study Went Untreated for 40 Years" *New York Times*, July 26, 1972; and VN Gamble, "Under the Shadow of Tuskegee: African Americans and Health Care." *American Journal of Public Health* 7(1997):1773-1778.

⁶⁷ Jon M. Harkness, "Prisoners and Pellagra", *Public Health Reports*, Sep/Oct96, Vol. 111 Issue 5, p 463.

⁶⁸ "They Were Cheap and Available: Prisoners as Research Subjects in Twentieth Century America." *British Medical Journal* 315:1437.

⁶⁹ Krista Thompson Smith, "Adventists and Biological Warfare", *Spectrum Magazine*, Vol 25, no. 3, March 1996 and David R. Franz, DVM, PhD, Cheryl D. Parrott, Ernest T. Takafuji, MD, MPH, "The US Biological Warfare and Biological Defense Programs" in *Medical Aspects of Chemical and Biological Warfare, Part 1; The Textbook of Military Medicine, Office of Surgeon General, Borden Institute* 1997; p. 425-436.

⁷⁰ Atomic Energy Commission Secret Memo by Kirkpatrick, E. E. Col. A January 8, 1947, This was a draft memo from

THE SCIENTISTS

Dr. Ewen Cameron⁷¹

Once the details of MKULTRA came to light, the focus in the media and in the Senate, was on the use of drugs, especially LSD. While the researchers within the project did indeed concentrate on developing a variety of hallucinogenic concoctions, they did so with an end in mind. The goal was to devise means and methods of enabling undercover operatives, soldiers, contractors or anyone who was involved in secret projects, to be able to keep those secrets if they were captured or interrogated. Hypnosis, combined with drugs, sensory deprivation and systematic abuse were seen as a means to that end. The leader in this pharmaceutical and psychological research was Dr. Ewen Cameron. Cameron was at the time, one of the most esteemed psychiatrists in the world. As president of the American Psychiatric Association, Canadian Psychiatric Association, and one of the founders of the World Psychiatric Association, Dr. Cameron began experimenting on brainwashing techniques as early as the 1930s with schizophrenic patients. At this time lobotomies were not yet in common use, though the procedure would begin to be implemented in 1936 on a wide scale. Electroshock therapy was some years from being accepted as a primary means of changing behavior.⁷²

Cameron relied on torturous and highly stressful techniques for breaking down the personality of his patients. Schizophrenics would be stripped down naked beneath red lights for eight hours a day, sometimes for up to eight months with repeated messages inundating their senses. In other experiments Cameron would attempt to induce the delirium associated with a high fever by cooking his patients in an electric cage until their body temperature reached 102 degrees.

From January of 1957 until September of 1960 Cameron became one of the promising researchers the CIA turned to in order to develop means and methods of “brainwashing” and programming

Colonel Kirkpatrick, Acting Manager, Field Operations of AEC, to the AEC Berkeley Area Engineer, puts the AEC stamp on termination of human testing, while simultaneously revealing it was going on under the Manhattan Project-at the request of Oppenheimer: "Until the Atomic Energy Commission is able to consider sponsoring this type of experimentation, authorization cannot be given for the use of radioactive materials in human subjects under this contract." A more current report from the National Security Archives that clearly lays out the timeline and the assault by researchers on “subjects” can be found at

http://www.gwu.edu/~nsarchiv/radiation/dir/mstreet/commeet/meet12/brief12/tab_f/br12f1d.txt----“ Personal Statement from Elizabeth Zitrin, Attorney at Law Public Member of the Ad Hoc Committee on Radiation Experiments”. For information on biological warfare experiments a good starting place is : *Biological Warfare: A Historical Perspective*, by LTC George W. Christopher, USAF, MC; LTC Theodore J. Cieslak, MC, USA, MAJ Julie A. Pavlin, MC, USA, and LTC (P) Edward M. Eitzen Jr., MC, USA. -- Operational Medicine Division, United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, Maryland, as posted at <http://www.fas.org/nuke/guide/usa/cbw/bw.htm>

⁷¹ This section about Dr. Cameron is based on Orlikow Vs. United States, CIA Settlement of Some Complaints. Ewen Cameron and the Allan Memorial Institute - Subproject 68 funded by CIA from March 18, 1957 to June 30, 1960 Without conceding liability, in 1988 the CIA agreed to pay \$750,000 to settle a case brought on behalf of nine plaintiffs who were subjected to federally funded mind control experiments sponsored by the CIA and conducted by prominent psychiatrist Ewen Cameron, M.D. The experiments included heavy doses of LSD, electroshock and psychic driving.

⁷² See “CIA Brainwashing Experiments”, *MacLean's*; January 28, 1985, Vol. 98 Issue 6, p46, 1/3p and “A cold-war horror show's last act”, *US News & World Report*; October 17, 88, Vol. 105 Issue 15, p13, 1/3p.

human beings to do the will of the agency. Cameron received \$64,242.44⁷³ from the CIA. to develop a combination of techniques that would destroy an individual's memory of an event and enable the programmer to control their behavior through post-hypnotic commands. Cameron used a variety of drug combinations coupled with prolonged sleep deprivation, isolation, hypnosis, and electroconvulsive therapy in order to "wipe" an individual's memory. His techniques worked, to a certain extent, but ethical considerations led the CIA to cut Cameron's funding in the US, prompting Cameron to move to Canada to continue his work with funding channeled through the Canadian Government.

He continued his work, officially, from 1961 until 1964 in Montreal where he received an additional \$57,750.⁷⁴ During this time Cameron combined his techniques (in a "therapy" he called de-patterning) with electroconvulsive therapy in which the voltage introduced into one subjects brain, Linda Macdonald, exceeded the APA's guidelines by 76.5 times. He succeeded in wiping her memory and to this day, she cannot remember anything prior to 1963. In a January 17, 1984 broadcast of the Canadian Broadcasting System, a program called "The Fifth Estate" detailed the experiments of Cameron, prompting a burst of investigative journalism culminating in a class-action suit brought against the CIA by former subjects. In 1988, the case was settled out of court for \$750,000, divided between 8 plaintiffs. Linda Macdonald received \$100,000 and legal fees from the Canadian government, but Cameron himself, faced no punishment.⁷⁵

Dr. Jose Delgado

Whereas Cameron focused on creating traumatized individuals through intense psychological pressure, Dr. Jose Delgado was investigating the direct route to control of "human subjects." Delgado physically invaded the brains of subjects with electrodes in order to create emotions and control actions with the push of a button. As he stated himself,

"We need a program of psychosurgery for political control of our society. The purpose is physical control of the mind. Everyone who deviates from the given norm can be surgically mutilated. The individual may think that the most important reality is his own existence, but this is only his personal point of view. This lacks historical perspective. Man does not have the right to develop his own mind. This kind of liberal orientation has great appeal. We must electrically control the brain. Some day armies and generals will be controlled by electric stimulation of the brain."⁷⁶

In his paper "Intracerebral Radio Stimulation and Recording in Completely Free Patients," Delgado observed that:

"Radio Stimulation on different points in the amygdala and hippocampus in the four

⁷³ CIA MORI ID 17468: www.wanttoknow.info/mindcontrol

⁷⁴ Collins, Anne. *In the Sleep Room. The Story of CIA Brainwashing in Canada.* Ken Porter Books, 1988

⁷⁵ Tyner, Arlene. Mind-Control Part 1: Canadian and US Survivors Seek Justice, *PROBE Magazine*, March-April, 2000

⁷⁶ Dr. Jose M.R. Delgado Director of Neuropsychiatry, Yale University Medical School. Congressional Record, No. 26, Vol. 118 February 24, 1974.

patients produced a variety of effect, including pleasant sensations, elation, deep thoughtful concentration, odd feelings, super relaxation (an essential precursor for deep hypnosis) colored visions, and other responses."⁷⁷

Delgado, to his credit, did make great strides toward a better understanding the physiology of brain structures and their attendant behavioral and emotional correlates, strides that did not go unnoticed by the intelligence community and the military.

While Delgado worked in an area of specific interest, the direct stimulation of brain structures through implanted electronics, other researchers explored means of creating multiple personalities and programming the alternate personalities that emerged to do a variety of intelligence related work as operatives, still others explored the effects of various drug combinations and other “programming” and interrogation techniques aimed at creating super spies and breaking down enemy agents.

THE EXPOSURE OF WATERGATE/MKULTRA/COINTELPRO

According to testimony by Senator Edward Kennedy in 1977,

"Some 2 years ago, the Senate Health Subcommittee heard chilling testimony about the human experimentation activities of the Central Intelligence Agency. The Deputy Director of the CIA revealed that over 30 universities and institutions were involved in an ‘extensive testing and experimentation’ program which included covert drug tests on unwitting citizens ‘at all social levels, [high and low], native Americans and foreign.’ Several of these [tests involved] the administration of LSD to ‘unwitting subjects in [social] situations.’ ... The Central Intelligence Agency drugged American citizens without their knowledge or consent. It used university facilities and personnel without their knowledge."⁷⁸

As an example of the hubris wrought by institutions veiled in secrecy, given unlimited funds and staffed with amoral people we can only refer to the statement made by George White in a letter to MKUltra director Sidney Gottlieb: "I toiled wholeheartedly in the vineyards because it was fun, fun, fun! Where else could an *American* boy lie, cheat, rape and pillage with the sanction and blessing of the All Highest?"⁷⁹

After Watergate, more information hit the papers, COINTELPRO was uncovered by a group of people who have never been apprehended, in spite of a six-year FBI investigation. The COINTELPRO program was secret until 1971, when an FBI field office was burglarized by a group

⁷⁷ "Intracerebral Radio Stimulation and Recording in Completely Free Patients," *The Journal of Nervous and Mental Disease*, Lippincott Williams & Wilkins, October, 1968.

⁷⁸ Testimony of US Senator Edward Kennedy, Joint Hearing before the Select Committee on Intelligence, US Senate, 95th Congress, 1977.

⁷⁹ (letter to Sidney Gottlieb) See also *Sex, drugs and the CIA*, by Douglas Valentine posted at <http://www.counterpunch.org/valentine0621.html>

calling themselves the Citizens' Commission to Investigate the FBI. These people broke into an FBI office in Pennsylvania, rifled through the filing cabinets and leaked to the press documents detailing the abuses suffered by a wide variety of activists, including a long-term plan to destroy Martin Luther King Jr.:

“Agents tapped his phone, bugged his rooms, trumpeted his supposed commie connections, and his sexual proclivities, and sicced the Internal Revenue Service on him. When it was announced in 1964 that King would receive a Nobel Peace Prize, the FBI grew desperate. Hoping to prevent King from accepting the award, the Bureau mailed him a package containing a tape of phone calls documenting King’s extramarital affairs and an anonymous, threatening letter (shown here in censored form). In barely concealed language, King was told to commit suicide before the award ceremony or risk seeing his "filthy, abnormal fraudulent self" exposed to the nation. Fortunately, King ignored the FBI’s advice. He accepted the award and lived four more years until his assassination.”⁸⁰

Some of the largest COINTELPRO campaigns targeted the Socialist Worker's Party, the Ku Klux Klan, the "New Left" (including several anti-war groups such as the Students for a Democratic Society and the Student Nonviolent Coordinating Committee), Black Liberation groups (such as the Black Panthers and the Republic of New Africa), Puerto Rican independence groups, the American Indian Movement, and the Weather Underground. Later, Director Hoover declared that the centralized COINTELPRO was over, and that all future counterintelligence operations would be handled on a case-by-case basis.⁸¹

In addition, the MKULTRA documents hit the press and a number of books were written about the subject, most notable were “The Search for the Manchurian Candidate” by John Marks, “Bluebird” by Colin A. Ross MD, and “A Nation Betrayed” by Carol Rutz. At this point victims began to come forward with claims of being horribly abused in these programs, one of the most famous is a woman named Candy Jones who described in stunning detail a tale of corruption and abuse.⁸²

When Jimmy Carter became President in 1976 he promptly moved to introduce a modicum of control, he instituted the Foreign Intelligence Surveillance Act establishing an 11 member secret court to oversee the surveillance activities of our covert agencies. As an example of the limited reporting requirements for the court we have the first report issued to Vice President

⁸⁰ Martin Luther King, Jr., “Statement on Joseph Alsop and J. Edgar Hoover's charge of alleged Communist infiltration of the Civil Rights Movement,” 23 April 1964 and Select Committee to Study Governmental Operations with Respect to Intelligence Activities, United States Senate, *Supplementary Detailed Staff Reports on Intelligence Activities and the Rights of Americans, Book III*, Final Report. 14 April 1976

⁸¹ "Me and My Shadow": A History of the FBI's Covert Operations and COINTELPRO - Part 1. Produced by Adi Gevins, Pacifica Radio. 1976. Rebroadcast by Democracy Now! Wednesday, June 5, 2002. See also Paul Wolf’s website for a detailed archive of official COINTELPRO documents and transcripts of the Church Committee hearings:<http://www.icdc.com/~paulwolf/cointelpro/cointel.htm>

⁸² Donald Bain, . The Control of Candy Jones. Chicago, *Playboy Press*, 1976. (Reissued in 2002 by Barricade books as The CIA's Control of Candy Jones with a new introduction by Bain)

Mondale from Attorney General Benjamin R. Civiletti in 1979:

This report is submitted pursuant to Section 107 of the Foreign Intelligence Surveillance Act of 1978, Title 50, United States Code Section 1807.

During calendar year 1979, 199 applications were made for orders and extensions of orders approving electronic surveillance under the Act. The United States Foreign Intelligence Surveillance Court issued 207 orders granting authority for the requested electronic surveillances. No orders were entered which modified or denied the requested authority.⁸³

Pointedly Carter's reform measure did not do anything to insure that the American public would be protected in the future from abuse and testing at the hands of the intelligence arm of the military-industrial complex. Carter's move to reform the CIA was to appoint an outsider as head of the agency, Admiral Stansfield Turner. After Turner took over as Director of the CIA 800 "rogue" agents were let go, though most all of them found work in various false front companies that had been set up in the previous years.⁸⁴

Both the Rockefeller Commission and the Church Committee revealed a long standing pattern of both developing new psychological, pharmaceutical and radiological technologies, to influence individuals and groups and long standing pattern of behavior whereby politically disruptive citizens were systematically targeted, harassed and destroyed. Yet there have, to date, been no provisions instituted which would stop this behavior, nor is there any guarantee that these kinds of covert programs ever actually ceased. The only practical change engendered by the disclosures of the 1970s was to drive these kinds of operations further into the shadows. That such research and experimentation may still be occurring is evidenced by a DOD directive, issued by the Secretary of the Navy on November 6, 2006 that specifically requires prior approval of the Under Secretary of the Navy before conducting "severe or unusual intrusions, either physical or psychological, on human subjects (such as consciousness altering drugs, or mind-control techniques)."⁸⁵

Non-Lethal Weapons Research Today

There is a long history that illustrates US Intelligence operations had tragic results for many involved. There was, however, no public debate surrounding these black operations because they were classified under the guise of national security. MKULTRA, Project PANDORA, plutonium testing, and many more projects conducted by the DOD and the CIA were exposed by committees

⁸³ 1979 FISA report can be obtained at the Federation of American Scientists website:

<http://www.fas.org/irp/agency/doj/fisa/1979rept.html>.

⁸⁴ William Blum, *The CIA: A Forgotten History*, Atlantic Highlands, New Jersey, Zed Books Ltd. 1986; Alan Moore Bill Sienkewitz, *Shadowplay-The Secret Team*, Forestville CA, Eclipse Books, 1987 and Leslie Cockburn, *Out of Control*, New York, Atlantic Monthly Press 1987.

⁸⁵ SECNAV Instruction 3900.39D, Subj: "Human Research Protection Program", November 6, 2006. www.fas.org/irp/DODdir/navy/secnavinst/3900_39d.pdf

led by Senators Rockefeller and Church in the 1970s.⁸⁶ However, tighter restrictions on human experiment including accountability and transparency did not occur until 1997, when President Clinton instituted revised protocols on human experiments.⁸⁷

Official reports insist that the research involving experiments during the 1950s through the 1970s was destroyed. Yet, the scientists involved went without punishment, free to continue their careers.⁸⁸ Given the levels of ongoing EMF technology research today, and the recent retroactive approval of torture approved by the Military Commissions Act, it may be that human testing is occurring under post-9/11 national security protocols. Can we accept that all the psychological research conducted with government funding up to the 1970s was simply destroyed? At this time, the American public has no way to answer this question. The current administration classifies more information than any previous US administration.⁸⁹ Unclassified documents have even been recalled and re-classified.⁹⁰

In the 1980s nuclear radiation experiments on humans became public knowledge and Russian tests making use of the electromagnetic spectrum were exposed.⁹¹ Countries around the world passed laws and signed treaties in response to the danger of weapons that could adversely effect human behavior or manipulate human cognition. The Russians banned all EMF weapons in 2001. These treaties have roots in the human radiation experiments of the 1950s, 1960s and 1970s. In effect, these treaties declared a basic tenant of human rights and cognitive liberties.⁹²

In the quest for global military superiority, the US stepped up funding for the concept of the “Future Warrior” beginning in the late 1990s with the use of advanced nano-technology.⁹³ The idea was to streamline the military, improve soldier performance, control the fighting in real-time and avoid soldier mortality. Toward this end, the concept was to enhance the ability of soldiers in the field to interface with computer systems by using their own brain waves.⁹⁴ The US began to fund research

⁸⁶ The Church and Rockefeller Committee reports can be accessed through the Assassination Archives and Research Center: <http://www.aarclibrary.org/publib/church/contents.htm>

⁸⁷ Memorandum of March 27, 1997--Strengthened Protections for Human Subjects of Classified Research. [Federal Register: May 13, 1997 (Volume 62, Number 92)] [Page 26367-26372].

⁸⁸ *Scientific American* talks about the work of Jose Delgado and states that Dr. Delgado stopped doing research as late as the 1990's, see: John Horgan, “The Forgotten Era of the Brain”, *Scientific American*, September 26, 2005.

⁸⁹ Declassification in Reverse: The US Intelligence Community's Secret Historical Document Reclassification Program, Matthew M. Aid. Located at the George Washington University National Security Archive, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB179/#report>.

⁹⁰ Executive Order 12958, originally signed by Clinton after Wen Ho Lee, a Los Alamos scientist was accused of giving the Chinese information, was amended by George W. Bush pm March 25, 2003. The amendment can be accessed at the White House website, <http://www.whitehouse.gov/news/releases/2003/03/20030325-11.html>.

⁹¹ *The United Nations and Disarmament: 1945-1985* by the UN Department for Disarmament Affairs. (1985) New York, UN Publication Sales

⁹² For a comprehensive listing of treaties and international conferences surrounding these concerns, see the Sunshine Project at <http://www.sunshine-project.org/>, See Also: *Human Rights: Beyond the Liberal Vision*, Judith Blau and Alberto Moncada, Rowman and Littlefield Publishers, 2005

⁹³ Amy Kruse, Program Manager at Defense Sciences Office, DARPA “Defense and Biology: Fundamentals for the Future”. MIT also has The Institute for Soldier Nanotechnologies established in 2002 with a five-year, \$50 million contract from the US Army, <http://web.mit.edu/isn/index.html>.

⁹⁴ See DARPA, “Neurotechnology for Intelligence Analysts”, <http://www.darpa.mil/dso/thrust/biosci/nia.htm>.

into decoding the brain as well as other neurological research. President George H.W. Bush declared the 1990s “The Decade of the Brain”.⁹⁵ At the same time, funding for computer to human interface poured into universities and Defense Advanced Research Projects Agency (DARPA) stepped up their research and development. In the universities, the field became “cognitive science” and within DARPA, the term “augmented cognition” was born.⁹⁶ While developments in brain research are touted for their amazing therapeutic advances in the medical field, they primarily serve the purposes of the US military.⁹⁷

Americans have little idea about the research concerning the capabilities of electromagnetism, directed acoustics, or computer-human interfacing. The majority of Americans do not know that we are currently using these new-concept weapons in Iraq and Afghanistan. Indiana University law professor David Fidler stated to the *Economist*, “because these weapons are most likely to be used on civilians, it is not clear that using them is legal under the international rules governing armed conflict...if they are used in conjunction with conventional weapons, they could end up making war more deadly, rather than less.”⁹⁸

A peek into the US arsenal of weapons is like a look into a science fiction film. DARPA and various military research labs provide a view of the current technology available to enhance US soldiers in the field and manipulate the emotions and behaviors of the perceived enemy. As American sentiment toward the Iraq war spirals downward, along with the approval ratings of the US president, domestic civil disobedience is likely to rise, as it has in many countries in response to US foreign policy.

Are new electromagnetic weapons in the possession of the government be used on American citizens? The issue at hand is whether the research and technology currently being developed will benefit or harm us and how much liberty we are willing to sacrifice for a possibly skewed sense of national security and protection.

In September 2006, Air Force Secretary Michael Wynne announced that crowd control weapons should be tested on Americans first. "If we're not willing to use it here against our fellow citizens, then we should not be willing to use it in a wartime situation," said Wynne. "(Because) if I hit somebody with a non-lethal weapon and they claim that it injured them in a way that was not intended, I think that I would be vilified in the world press."⁹⁹

⁹⁵ The proclamation declaring the 1990's the “Decade of the Brain” was signed by President George H.W. Bush on July 17, 1990, which can be accessed at the Library of Congress, <http://www.loc.gov/loc/brain/proclaim.html>.

⁹⁶ See the Augmented Cognition International Society, <http://www.augmentedcognition.org/history.htm>.

⁹⁷ Frontiers in Neuroscience- Artificial Intelligence in the Pentagon and Beyond. <http://www.neuropsychiatryreviews.com/mar06/android.html>

⁹⁸ “Electromagnetic weapons: Come fry with me”, *The Economist*, January 30, 2003.

⁹⁹ Lolita C. Baldor, Associated Press, 9/12/2006. In addition to this comment, the Air Force released a declassified document located at the website of the Federation of American Scientists, (<http://www.fas.org/sgp/eprint/hamilton.pdf> directing the acquisitions team from the media. The author is the USAF principal deputy assistant secretary for acquisition, management and logistics, Darlene Druyun: “Effective immediately, I do not want anyone within the Air Force acquisition community discussing any of our programs with the media (on or off the record). This includes presenting program briefings in any forums at which the media may be present.”

Non-lethal weapons sound harmless in relation to guns and bombs. However, non-lethal weapons are not just tazers and annoying sounds. Nor are they harmless. In fact, NLWs are such a concern that many countries have treaties demanding transparency. Beginning in the 1990s, groups have formed to provide oversight of NLW research, including international committees, concerned scientists, and citizens' groups including the Federation of American Scientists and the Center for Cognitive Liberty and Ethics.¹⁰⁰ The proliferation of NLWs have raised concern within the EU, Russia, and other countries, as records of Cold War abuses come to light and people come forward with complaints of illegal testing.¹⁰¹

The concern is more than a political issue and stretches beyond civil liberties into human rights as they relate to a person's cognitive liberties. The following section highlights technologies with the capability to control and manipulate individuals or large groups of people.

Crowd Control using the Electromagnetic Spectrum

The electromagnetic spectrum has provided the military with an expanse of weapons, which are operational and in military and private use today in the form of millimeter waves,¹⁰² pulsed energy projectiles, and high power magnetic weapons.

Project Sheriff

The US has deployed the Project Sheriff active denial weapon in Iraq. Raytheon outfitted Humvees with their Silent Guardian Protection System, a device capable of heating the skin to 1/64 of an inch, causing instant pain similar to intense sunburn,¹⁰³ with the goal to facilitate dispersing a crowd. According to a report released by the Air Force on the human effects of this weapon, people with contact lenses and those wearing metal suffered greater effects. An imprint of a coin was discovered on the skin of a test subject and death or severe heart problems may occur.¹⁰⁴

Pulsed Energy Projectiles

¹⁰⁰ For a list of these groups see, Non Lethal Weapons, July 2005, compiled by Terry Kiss, Bibliographer, Air University Library, Maxwell AFB, AL accessed at the Maxwell Internet site, <http://www.au.af.mil/au/aul/bibs/soft/nonlethal.htm> and Appendix A of this paper.

¹⁰¹ For further reading on these treaties, see *The Bulletin of Atomic Scientists*, September/October 1994 pp. 40-45 (vol. 50, no. 05), "The Soft Kill Fallacy" by Steven Aftergood and Barbara Hatch Rosenberg's in the same issue, "Sidebar: A non-lethal laundry list". Rosenberg cites the Conference on Disarmament, *Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament*, Aug. 26, 1992, Nos. 22, 25, 34 (CD/1170) as well as the treaty, "Convention on Prohibition or Restriction of the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects."

¹⁰² A detailed study conducted by Andrei G. Pakhomov, Yahya Akyel, Olga N. Pakhomova, Bruce E. Stuck, and Michael R. Murphy with the Brooks Air Force Base, Human Effectiveness Directorate, offers a scientific analysis of the effects of millimeter waves, "Current State and Implications of Research on Biological Effects of Millimeter Waves: A Literature Review", McKesson BioServices (A.G.P., Y.A., O.N.P.), U. S. Army Medical Research Detachment of the Walter Reed Army Institute of Research (B.E.S.), and Directed Energy Bioeffects Division, Human Effectiveness Directorate, Air Force Research Laboratory (M.R.M.), Brooks Air Force Base, San Antonio, TX.

¹⁰³ US Non Lethal Weapons for Iraq http://www.oft.osd.mil/library/library_files/article_461_Boston%20Globe.doc

¹⁰⁴ "Rumsfeld's Ray Gun," By Kelly Hearn, *AlterNet*. Posted August 19, 2005, <http://www.alternet.org/story/24044/>

Pulsed Energy Projectiles (PEPs) are another form of weaponry that is used to paralyze a victim with pain. According to *New Scientist* magazine, the expanding plasma effects nerve cells, but the long-term effects remain a public mystery.¹⁰⁵ The Joint Non-Lethal Weapons Program reports that, PEPs create a flash bang effect that startles and distracts.¹⁰⁶ However, the effects are much greater than just startling an individual. A 2001 *Time* magazine article states that the PEP “superheats the surface moisture around a target so rapidly that it literally explodes, producing a bright flash of light and a loud bang. The effect is like a stun grenade, but unlike a grenade the pep travels at nearly the speed of light and can take out a target with pinpoint accuracy...as far away as 2 km.”¹⁰⁷

While the effects of these weapons appear to be short-term and topical in nature, there is evidence that electromagnetic weapons have effects on the brain, including sleep disruption and behavior changes.¹⁰⁸ They can produce anxiety and fear or compliance in humans. It is possible to use these weapons as a means of torture, yet without knowing exactly when, where, and how the weapons are used, we are left to speculate.¹⁰⁹ An article by David Hambling in *New Scientist* magazine, March 2005, was titled, “Maximum pain is aim of new US weapons.” In 2006, Dr. Brian Martin, associate professor in Science, Technology and Society, University of Wollongong, Australia, co-authored a paper entitled “Looming struggles over technology for border control,” which describes the potential catastrophes that would lead to an extreme border protection plan. In the event of a natural disaster, or the rapid reduction of resources, or a major climactic change such as drought, rich countries will have a need to reinforce their borders against a massive influx of refugees. This scenario is often described in the nation-state context but it is possible to imagine such a perceived need in the event of internal civil unrest.

Directed Acoustics

In Maoist China, cities were equipped with megaphones, bombarding the people with on-going propaganda. The megaphones were in full vision of the people, yet there was no way to escape the sound. Today technology exists that fills a similar purpose. Voice to Skull directed acoustic devices are neuro-electromagnetic non-lethal weapons that can produce sounds within the skull of a human.¹¹⁰

A similar technology, known as Hypersonic Sound, is used in a similar fashion. According to its inventor, Elwood Norris of American Technology Corporation (ATC), the handheld speaker can

¹⁰⁵ See government contract M67854-04-C-5074, University of Florida, Division of Sponsored Research, July 1, 2004. Also located at <http://www.defensetech.org/peoplezapping.pdf>

¹⁰⁶ According to a 2002 Joint Non Lethal Weapons Program document: www.dtic.mil/ndia/2002infantry/swenson.pdf

¹⁰⁷ Lev Grossman, “Beyond the Rubber Bullet”, *Time Magazine*, July 21, 2002.

¹⁰⁸ David S. Walonick, “Effects of 6-10 Hz ELF on Brain Waves, www.borderlands.com/archives/arch/elf.htm

¹⁰⁹ David Hambling, Maximum Pain is Aim Of New US Weapons, *New Scientist*, March 2005.

¹¹⁰ Definition from the Center for Army Lessons Learned, Fort Leavenworth, KS: “Nonlethal weapon which includes (1) a neuro-electromagnetic device which uses microwave transmission of sound into the skull of persons or animals by way of pulse-modulated microwave radiation; and (2) a silent sound device which can transmit sound into the skull of person or animals. NOTE: The sound modulation may be voice or audio subliminal messages. One application of V2K is use as an electronic scarecrow to frighten birds in the vicinity of airports.”<http://call.army.mil/products/thesaur/00016275.htm>

focus sound waves directly at a person without anyone else hearing the sound. The technology is being tested by corporations such as McDonald's and Wal Mart to direct advertisements into a consumer's head.

The Long Range Acoustical Device (LRAD),¹¹¹ is used by the military in situations such as crowd control, mass notification, and perimeter enforcement. For instance, an unruly mob may not hear a warning to disperse with traditional acoustic technology, or border enforcement agents may need to warn an approaching intruder to turn away or face bodily harm. The technology has advantages over lethal force, yet it also has the potential to inflict physical harm, emotional manipulation, and death. According to *Defense Update*, the LRAD can produce a 150-decibel acoustic beam from 300 meters away. The human threshold for pain is between 120 to 140 decibels.¹¹² In a 2003 *New York Times* article Mr. Norris demonstrates his technology to the reporter. At 1% of capacity, the reporter's eyes hurt, and hours later still experienced a headache.¹¹³

This technology can inflict permanent damage and death despite its classification as a non-lethal weapon. While the LRAD may be seen as a way to save lives in times of disaster or to avoid civilian casualties, the LRAD and similar directed acoustics may be cause for concern to those who exercise their right to assemble and conduct peaceful demonstrations and protests. The New York City police used the LRAD at the Republican National Convention and it was also used in Miami at a WTO Free Trade protests.¹¹⁴ Covering one's ears will not protect a person and given, the long-range capabilities, fleeing from the beam may not help either (as evidenced in the use of directed acoustics against Jewish settlers in Gaza). The Associated Press (AP) reported that a device called "the scream" was used in a 2005 protest against Palestinians who "covered their ears and grabbed their heads, overcome by dizziness and nausea, after the vehicle-mounted device began sending out bursts of audible, but not loud, sound at intervals of about 10 seconds. An AP photographer at the scene said that even after he covered his ears, he continued to hear the sound ringing in his head."¹¹⁵

Neurological Technology

Neurobiology has many facets including therapeutic applications with Alzheimer's, epilepsy, depression, and stroke victims using Transcranial Magnetic Stimulation (TMS). Bush's Decade of the Brain produced outstanding advances for those with spinal cord injuries as well, which allows a paralyzed person to control a computer screen or a limb with a brain implant. There is also a new field in neurological research, Augmented Cognition. From universities to private business to the military, advances in neuro-technology can be used for amazing good. However, as we learned from the history of the Cold War, technology that has the capacity to heal also has the capacity to harm. Of great concern is the research being conducted at DARPA, which is trying to revolutionize the way soldiers receive information, respond to orders, adapt to stress, and perform while sleep

¹¹¹ The LRAD is another invention of Elwood Norris of American Technology Corporation.

¹¹² Jurgen Altmann, "Acoustic Weapons: A Prospective Assessment," *Science and Global Security*, Vol. 9, p. 13.

¹¹³ Marshall Sella, "The Sound of Things to Come", *New York Times*, March 23, 2003.

¹¹⁴ Amanda Onion, "RNC to Feature Unusual Forms of Sound", Aug. 25, 2004, ABC News

¹¹⁵ Associated Press, "Israel May Use Sound Weapon On Settlers", 6/10/2005. Available at: http://www.huffingtonpost.com/2005/06/10/israel-may-use-sound-weap_n_2444.html

deprived.

TMS is being developed for military purposes using electrical impulses at close proximity to the skull to enhance mood, affect sleep patterns, and increase creativity.¹¹⁶ This technology is beginning to replace electro-shock therapy. DARPA granted a contract to the Medical University of South Carolina to research now to improve a soldier's performance. A soldier's reaction to stress may be less intense, or a 40-hour flight will allow for the soldier to remain awake without the side effects of sleep deprivation.¹¹⁷ Few, if any, understand the long-term effects of TMS, given its relative infancy in the overall field of Augmented Cognition. Does TMS produce unknown neurological effects ten, twenty, fifty years down the road? To what extent is TMS being researched? TMS is part of the overall field of Augmented Cognition. In essence, Augmented Cognition allows a human to interact with a computer through brain waves. The idea is to enhance a person's cognitive capabilities in the area of memory, learning, attention, visualization, and decision-making.

One application of augmented cognition allows a user to monitor a person's brain functions and send anticipatory commands to the person being monitored. For instance, a military command unit will be able to monitor a pilot in a cockpit, and based on the sensory output of the soldier, the base command can input messages directly into the pilot's brain to improve performance. DARPA describes this as a human computer symbiosis whereby, "This research will enable development of closed loop human-computer technologies, where the state of the user is measured, analyzed, and automatically adapted to by the computational system."¹¹⁸ The increase in human-computer relations and the ability to manipulate and control a person's senses, memory, and neural output has wide implications.

The basic ability to enter a person's mind is not a futuristic fantasy. This is real and in prototype. DARPA began this research in 1983.¹¹⁹ The Internet has become a focal point in our lives with reliance for information and communication. Our interaction and intimacy with computers is increasingly pervasive, as is our exposure to the field of augmented cognition. DARPA does not address the implications of such symbiosis, or the dilemma of the extent to which a person can or should be manipulated. The use of this technology is used for military purposes but it may not be long until it is used to "improve" the factory worker, prisoners, or the mentally ill.

¹¹⁶ "Transcranial Magnetic Stimulation: An Introduction", Grant Balfour, v1.0 - May 6, 2002 available at: www.cognitiveliberty.org/issues/TMS_index.html

¹¹⁷ MUSC To Develop Brain Stimulation Device For Military, Charleston, SC, May 9, 2002, www.musc.edu/pr/darpa.htm, "The overall goal of the project is to use the unique resources at MUSC's Brain Stimulation Laboratory and Center for Advanced Imaging Research to determine if: 1. non-invasive stimulation of the brain can improve a soldier's performance, 2. and then design, manufacture and test a prototype of a system that would be capable of delivering this technology in the field."

¹¹⁸ Improving Human Performance Through Advanced Cognitive System Technology, Dylan D Schmorow and Amy A Kruse, LCDR MSC USN, Defense Advanced Research Projects Agency, Arlington, VA, Strategic Analysis Inc., Arlington, VA, Available at: [http://ntsa.metapress.com/\(2pq1al55mfylqgf0n3cvjc45\)/app/home/contribution.asp?referrer=parent&backto=issue,91,167;journal,5,7;linkingpublicationresults,1:113340,1](http://ntsa.metapress.com/(2pq1al55mfylqgf0n3cvjc45)/app/home/contribution.asp?referrer=parent&backto=issue,91,167;journal,5,7;linkingpublicationresults,1:113340,1)

¹¹⁹ New Generation Technology: A strategic plan for its Development and Application to Critical Problems in Defense, DARPA, 1983.

The Implant

Another realm of brain research is the field of neural implants. Until recently, implants were a futuristic fantasy. Current advances in the private and military sectors have produced an implant that can allow a victim of a spinal cord injury to walk again or give an amputee the ability to control her leg with her mind. In the private sector, Cyberkinetics is leading the way to liberating some people from wheelchairs. This technology is a path to a more functional way of life, but it is also possible that the use of implants could be used for malevolence.

John Donohoe, founder, chief scientific officer, and director of Cyberkinetics, addressed the issue of mind control and neural implants. When asked if creating a brain-machine interface will open the door to mind control Donohoe responded, “We do that all the time already. Advertising is mind control. Even pharmaceutical agents are a form of mind control. When people have behaviors that deviate far from the norm, they are given medications that bring their mind back into the realm of behavior that we call normal. If a child were to have a seizure and became unconscious because of the seizure, and we controlled his mind so that he did not have seizures, that would be a wonderful thing. We want to do that.”¹²⁰

The Experts¹²¹

Many scientists, philosophers, psychologists, and military analysts have written on the possibilities of accumulating information directly from the human brain as well as controlling human beings for various governmental and militaristic purposes using the aforementioned technologies. What follows are excerpts from recent interviews conducted by the authors with notable experts focusing on the capabilities of US EMF technologies and concerns about human rights and cognitive liberty. We contacted twenty-two experts in the fields of EMF technologies, many would not comment. The following are quotes from four experts who were willing to publicly address the subject.

Vladimir Nikolaevich Lopatin

Director of The Republican Scientific Research Institute of Intellectual Property, Moscow, former Deputy of the State Duma of the Russian Federation on the Vologda from 1995 to 1999, and Senior Assistant to the General Public Prosecutor of the Russian Federation. During the 1990s Lopatin was active in the Russian Federation’s banning of EMF technologies for military purposes.¹²²

¹²⁰ Neuroscience: John Donoghue By Aaron J. Sender, *Discover* Vol. 25 No. 11, November 2004, Mind & Brain

¹²¹ Gaining interviews with DARPA scientists and officials at the Human Effectiveness Directorate at Brooks proved troublesome. For information about current projects, see DARPA Defense Science Program, specifically COL Geoffrey Ling, M.D., PhD’s program “Human-Assisted Neural Devices” and Amy Kruse’s Improving War fighter Information Intake Under Stress (AugCog) and Neurotechnology for Intelligence Analysts. At the Human Effectiveness Directorate see Andrei G. Pakhomov , Yahya Akyel , Olga N. Pakhomova , Bruce E. Stuck , Michael R. Murphy, “Current state and implications of research on biological effects of millimeter waves: A review of the literature”, in *Bioelectromagnetics*, Volume 19, Issue 7 , Pages 393 - 413.

¹²² The following are excerpts of an interview with Lopatin translated by U.C. Davis student, Tatiana Kanare.

The following are quotes from Lopatin:

“At the same time, the necessity of protection from information weapons, information terrorism and information war is being discussed more often during the last years.”

“...according to the Security Department of the Russian Federation, directors of Russian Special Services and the Ministry of Defense of Russia. Based on the data of special services, by the beginning of the 21st century expenses for purchasing means of information war increased within the last 15 years in the USA in four times and are ahead of all armament programs. Information confrontation during the times of a regular war began to change to a new, higher level – information war.”

“According to article 6 of the Federal Law “On weapons,” as of July 30, 2001, on the territory of the Russian Federation it is forbidden to circulate as means of civil and service weapons: ‘weapons and other objects, destructive ability of which is based on the use of electro-magnetic, light, heat, infrasound and ultrasound radiation and which have output parameters that exceed the amounts, set by state standards of the Russian Federation and norms of the federal body of executive power responsible for healthcare, and also mentioned above weapons and objects, manufactured outside of the territory of the Russian Federation’.”

Carol Smith

British psychoanalyst, private practice in London, member of The College of Psychoanalysts and the Institute for Psychotherapy and Social Studies and member of their Ethics Committee.

Asked if there are human rights concerns associated with these particular non-lethal weapons, Smith answered, “Yes – it depends though by what is meant by ‘the wrong hands’. For people who are targeted for experimentation – all such devices need testing – all hands are the wrong hands, be they government, private commercial, or sadistic/commercial. Ionatron, a large company based in Arizona, developed plasma channel directed energy weapons and state in their website: ‘What are LIPC laser-guided directed-energy weapons? Laser-guided directed-energy weapons work like “man-made lightning” to disable people or things. LIPC technology is Ionatron’s proprietary type of laser-guided directed-energy weapon. LIPC stands for laser-induced plasma channel; the plasma channel is how the energy is directed through the air at the target. Extremely fast femto-second lasers cause light to break into filaments, which form a plasma channel that conducts the energy like a virtual wire. This technology can be adjusted for non-lethal or lethal use’.”

Discussing neurotechnology, Smith adds, “Brain mapping indicated to us the pleasure centers of the brain. TMS is the accessing these with rapidly changing magnetic fields to produce electrical fields.

If the right hand rule is operative, the effect of inducing electrical fields by changing magnetic fields improves mood.

(Lenz’s law, however, gives the direction of the induced electromotive force (EMF) resulting from electromagnetic induction, thus: The EMF induced in an electric circuit always acts in such a

direction that the current it drives around a closed circuit produces a magnetic field which opposes the change in magnetic flux.) In other words, it would be possible to create depression and a feeling of overwhelming hopelessness by the induction of a current into the electrical circuit of the brain, which opposed the change in magnetic flux.¹²³

“In 2004, The US Air Force Directorate: Controlled Effects gives a clear picture of objectives: “The Controlled Effects long-term challenge focuses technology developments in three primary areas Measured Global Force Projection looks at the exploitation of electromagnetic and other non-conventional force capabilities against facilities and equipment to achieve strategic, tactical, and lethal and non lethal force projection around the world. Controlled Personnel Effects investigates technologies to make selected adversaries think and act according to our needs. Dominant Remote Control seeks to control, at a distance, an enemy's vehicles, sensors, communications, and information systems and manipulate them for military purposes. The S&T Planning Review panel looked first at extending the applications of advanced military technologies currently under development and then at new, revolutionary technologies for their military significance.”

“For the Controlled Personnel Effects capability, the S&T panel explored the potential for targeting individuals with non lethal force, from a militarily useful range, to make selected adversaries think or act according to our needs. Through the application of non-lethal force, it is possible to physically influence or incapacitate personnel. Advanced technologies could enable the war fighter to remotely create physical sensations such as pressure or temperature changes. A current example of this technology is Active Denial, a non-lethal counter-personnel millimeter wave system that creates a skin heating sensation to repel an individual or group of people without harm. By studying and modeling the human brain and nervous system, the ability to mentally influence or confuse personnel is also possible. Through sensory deception, it may be possible to create synthetic images, or holograms, to confuse an individual's visual sense or, in a similar manner, confuse his senses of sound, taste, touch, or smell. Through cognitive engineering, scientists can develop a better understanding of how an individual's cognitive processes (pattern recognition, visual conditioning, and difference detection) affect his decision-making processes. Once understood, scientists could use these cognitive models to predict a person's behavior under a variety of conditions with the potential to affect an adversary's mission accomplishment via a wide range of personnel effects.”¹²⁴

Dr. Dean Radin

Former positions at AT&T Bell Labs and GTE Labs on advanced telecommunications R&D, appointments at Princeton University, University of Edinburgh, University of Nevada, SRI International and Interval Research Corporation, co-founder of the Boundary Institute, Senior Scientist at the Institute of Noetic Sciences. Adjunct appointment at Sonoma State University, Distinguished Consulting Faculty for Saybrook Graduate School.

“I have spoken with experts in this area (extremely low frequency) about health effects in general

¹²³ To access Lenz's Law online, go to: <http://www.launc.tased.edu.au/online/sciences/physics/Lenz's.html>

¹²⁴ For the complete briefing see the Air Force Research Lab website at <http://www.afrlhorizons.com/Briefs/Jun04/DE0401.html>.

and the consensus seems to be that non-ionizing EM radiation definitely does have effects on living systems, from individual cells to human behavior. The principle health concern is childhood leukemia associated with proximity to high-tension lines. There the epidemiological evidence is fairly clear. On other sources of EM, like cell phones and microwaves, the jury still seems to be out, although I strongly suspect that directed microwaves at non-ionizing strength can induce all sorts of behavioral changes through direct influence of the nervous system. This comes from my contacts in the non-lethal weapons arena, which is often lumped in with the hysteria over supposed psychic mind-control. All things being equal, I'd rather see development of non-lethal weapons than lethal ones. How such weapons are actually used is another matter, of course."

"The question is, were there ever elements of the intel/military world engaged in experiments on human behavior (not mind) control? Yes, many decades ago, during the cold war. But is such work still taking place? I don't know, because if it is it would be a black project and then by definition only those involved would know of it. I hope no such projects are underway, because I do believe that EMF, used in nefarious ways, can destabilize the brain, and potentially generate feelings of violence or apathy. But I very strongly doubt that specific thoughts or intentions or actions can be induced"

Dr. Nick Begich

He is the editor of Earthpulse Flashpoints, a new-science book series and published articles in science, politics and education and is a well known lecturer, having presented throughout the United States and in nineteen countries. Begich has served as an expert witness and speaker before the European Parliament and has spoken on various issues for groups representing citizen concerns, statesmen and elected officials, scientists and others. He is the publisher and co-owner of Earthpulse Press and Executive Director of The Lay Institute of Technology, Inc. a Texas non-profit corporation.

"There are several ways that microwaves can affect humans. For instance, the Sheriff and weapons that can heat the skin for crowd control do what the military states but they are capable of much more. The thermal heating weapons act like a car radio; you can change the frequencies to get different effects. The electromagnetic weapons send an impulse through the nervous system. They can transfer sounds, like Woody Norris' directed acoustic weapons, which is contracted to the US government. It modulates a signal that is a radio frequency, which can be changed to affect certain organs. It can override an organ like the heart or the liver. So changing the perimeter is like changing the broadcast on the radio. These extremely low frequencies also have the capability to send messages directly into the head when only the receiver can hear it. (see the 1985 Radiofrequency Radiation Dosimetry Handbook)."

"The handbook talks about electromagnetics and about the rapid healing of bones. The frequencies can also be used to manipulate the brain and create a disequilibrium. These frequencies can also imbed signals on radio broadcasts to create a feeling of fear or anxiety. The US military would embed these signals on the Muslim prayer broadcasts during the first Gulf War. This was called Project Solo."

“During the 1990’s, in both presidential administrations, non-lethal weapons such as these and others received priority funding. The Secretary of Energy under Clinton, O’Leary, warned that over a 40 year period, 500,000 had been unwitting test subjects for military research on non-lethal weapons, including MKULTRA who claims among many victims, Ted Kaczinky, the Unabomber. There is no way to know who these people are or how to help them because there is paranoia in the military and no oversight in Congress. These black projects probably don’t even make it to the President.”

“The problem is that the military’s role is to be paranoid and think up scenarios where the worst can happen then prepare for this in order to protect the people from a hypothetical future event. But there is little to no oversight. The Senate Intelligence Committee is made up of people like Ted Stephens who thinks the internet is made up of pipes and tubes. These people do not have the required background knowledge to ask the right questions. According to the defense budget report, 40% of the budget is dedicated to black projects. There is no oversight and no public knowledge. In the European Union, things are much different.”

“In February 1998, I testified before the European Union parliament for an hour and a half and convinced them of the detrimental effects of non lethal weapons on humans, their behavior and their minds. The EU was convinced and passed a resolution banning the use of weapons that can manipulate a person (see Parliament Resolution A4-005/99 entitled "Resolution on the Environment, Security, and Foreign Policy" passed on January 29, 1999). During the hearings, the US representative and NATO representatives sat in the back and declined to participate when asked. In the US, there is no such resolution or anything remotely close to being considered by any member of Congress. There is no concern for it in the US because no one knows about them.”

“During the 1980’s and 1990’s, there were a lot of papers that came out of the Naval War College and from top military officials that advocated using weapons that would cut down on the carnage seen by the American public in order to maintain public support. There was another paper that discusses how people will give up their liberties if they lived in a climate of fear by an outside enemy. If the US public knew about these weapons and what they could potentially asked to give up, their minds, the public would resist. So now, these weapons are being developed by the companies that comprise the industrial military complex who are immune from FOIA requests.”

“Without oversight, these weapons will a government to have absolute control. These weapons are most certainly in the hands of most industrialized countries. China certainly has them as intelligence reports released by the CIA reveal claims about these new concept weapons. There needs to be a debate in the public sphere because while these weapons appear frightening, they have amazing therapeutic potentials. There is the possibility of quicker healing and curing disease and what is just as important about government transparency concerning weapons is the transparency of life saving science being kept from the public. If we have the ability to cure and the government or military hides this, we have just as big a problem.”

Summary Analysis of Expert Interviews

From the four interviews we were able to complete, there is a clear consensus of concern for the potentiality of human rights abuses with EMF weapons testing and use. They collectively agree that the US is the leading global researcher in this area and spends increasingly more money building this technology. It is also clear that we know very little about the actual levels of experimentation, research, and capabilities of EMF weapons technologies due to high levels of US government security.

Department of Defense Military Contractors

Military contractors run our wars in concert with power elites. The corporation also has the power to determine which studies will reach the public.¹²⁵ To be certain, the military, in the interest of budgets, will allow negative or alarming studies to remain unreported or lost in a sea of classified documents.

The power of the military and DOD contractors is staggering. In the interest of national security and lessons learned from an open democracy during the 1970s and the 1990s, operations have become more black. In essence, no one can know with certainty what our military, government, or corporations have in store for the world, though, we have some clues.

Michael Vickers, senior adviser to the Secretary of Defense for the 2005 Quadrennial Defense Review and principal strategist for the largest covert action program in the CIA's history, recently testified on the importance of black operations:

“US Special Operations Command’s (SOCOM) emphasis after 9/11 has been to make white Special Operations Forces (SOF) more gray and black SOF more black. It is imperative, however, that white and black SOF be integrated fully from a strategic perspective.”¹²⁶

The money involved in the non-lethal weapons industry is growing and military contractors are reaping the profits. According to Defense Industry Daily, Aardvark Tactical, Inc. in Azusa, CA won a \$50 million contract to develop non-lethal weapons, anti-terrorism capabilities, and riot gear.¹²⁷ Ionatron was awarded a \$12 million contract to develop the Laser Induced Plasma Channel technology which produces man-made lightning bolts.¹²⁸ SAIC received a \$49 million in November 2004 to develop High Power Microwave and other directed energy systems while Fiore Industries received a \$16.35 million contract for similar technology and ITT received a \$7.85 million contract

¹²⁵ From *Microwave News*, July 2006, “Radiation Research and The Cult of Negative Results:” “When we investigated who sponsored the microwave-DNA papers published in Radiation Research, we discovered that four out of five were paid for by the wireless industry—notably Motorola—and/or the US Air Force, both of which have a long history of trying to control or suppress EMF research. Indeed, industry and the USAF paid for more than 75% of all the negative genotox studies, that is those published in all the various journals.”

¹²⁶ According to Michael Vickers biography at the Center for Strategic Defense Budget Studies’ website, “The paramilitary operation that drove the Soviet army out of Afghanistan and played a major role in ending the Cold War.” http://www.csbaonline.org/6About_Us/2Staff_Directory/Michael_Vickers.htm

¹²⁷ “\$50M for USMC Riot Gear, Protection Items, and Non-Lethal Weapons”, *Defense Industry Daily*, July 27, 2005.

¹²⁸ “Ionatron Facing Scrutiny Over Laser Projects”, *Defense Industry Daily*, May 24, 2006.

for the same in 2000.¹²⁹ Fiore Industries received a \$7.1 million for High Power Microwave Research and Experiment Program as early as 1994 and the same year Hughes Missile Systems Company received a \$6.6 million contract for *High Power Microwave Suppression of Enemy Air Defense Technology*.¹³⁰ Lockheed Martin secured a deal with DARPA in 2005 to continue the development of the Space Based Radar Antenna Technology in a \$19.5 million contract.¹³¹ According to the Lockheed press release, the technology, “could significantly increase global persistent surveillance coverage”.

In May of 2006, the Air Force issued \$24 million in contracts for “Electro Magnetic Effects Research and Development” to Northrup Gruman, Voss Scientific, Lockheed Martin, Electro Magnetic Applications, and SAIC among others.¹³² The DOD viewed electromagnetic research and development as a key component in future wars as early as the 1990s. Emmett Paige Jr., Assistant Secretary of Defense for Command, Control, Communications and Intelligence declared in 1996 that, “Well over a decade ago, a Soviet general reportedly said something like ‘to prevail in the next conflict, one must control the electromagnetic spectrum.’ That statement proved true in the Bacca Valley and on deserts in Iraq. The Department of Defense is committed to ensuring that “in the next conflict it is we who will control the spectrum. We know its value’ .¹³³ Increasingly, the value of non lethal weapons continues to rise as they produce fewer images of death in the media than traditional weapons.”

In addition to DOD contractors, the realm of non-lethal weapons extends into the universities with millions of dollars in scholarships and research fellowships. Pennsylvania State University, sponsors the Institute for Non-Lethal Defense Technologies (INLDT), the University of Medicine and Dentistry of New Jersey has the Stress and Motivated Behavior Institute, University of New Hampshire houses the Non-lethal Technology Innovation Center, and many US military schools have classes directly related to non-lethal weapons technology.¹³⁴ There are also numerous conferences each year hosted by the Department of Defense, contractors and universities.¹³⁵ The business of non-lethal weapons is expanding and will continue to grow. In 2006, the Joint Non-Lethal Weapons Directorate received \$43.9 million compared to \$25.8 million in 2000.¹³⁶

Ionatron’s website states that, “...the market for new directed-energy applications (will increase to \$12.7 billion over the next ten years for the defense market alone.”¹³⁷

¹²⁹ “USAF Detachment 8 Continues US Research Into EMP-Microwave Weapons”, *Defense Industry Daily*, March 7, 2006.

¹³⁰ *ibid.*

¹³¹ Lockheed Martin news release, May 23, 2005, “Lockheed Martin Selected for Continued Development of the Innovative Space Based Radar Antenna Technology (ISAT)”.

¹³² US Department of Defense Office of the Assistant Secretary of Defense (Public Affairs), No. 169-06 March 01, 2006.

¹³³ United States Department of Defense Speech, Volume 11, Number 83, “Electromagnetic Spectrum: Key to Success in Future Conflicts”, <http://www.defenselink.mil/speeches/index.html>.

¹³⁴ See Industrial College of the Armed Forces, Naval War College, and the US Army War College course offerings on their websites.

¹³⁵ Bunker, Robert J., “Non-Lethal Weapons Conferences”, *Military Review*, vol. 80, no. 2, Mar./Apr. 2000, pp. 103-109.

¹³⁶ Pappalardo, Joe, “Homeland Defense Plan Favors Non-Lethal Technology”, *National Defense Magazine*, June 2005.

¹³⁷ Direct quote from the Ionatron website: <http://www.ionatron.com/default.aspx?id=4>, accessed August 2006.

Despite Clinton's reforms on human testing, the government, military and the corporation will undoubtedly want to test these weapons on humans whenever possible. Easiest to test would be prisoners in undisclosed CIA detention centers, civilians in war torn regions, and even US citizens in protest crowds or civilian jails. In addition to the rubber bullets and pepper spray, which are common in many police forces, new concept weapons are also in use. Perhaps soon Americans will learn first-hand, the effects of the new human control technologies.

However, hundreds of people continue to assert that a person or persons, whom they do not know, have been targeting them with electromagnetic weapons in a widespread campaign of either illegal experimentation or outright persecution.

These experiences involved a number of discrete phenomena:

Hearing voices when no one was present.

Feeling sensations of burning, itching, tickling, or pressure with no apparent physical cause.

Sleeplessness and anxiety as a result of "humming" or "buzzing".

Loss of bodily control, such as twitching or jerking of an arm or leg suddenly and without control.

Unexpected emotional states, such as a sudden overwhelming feeling of dread, rage, lust or sorrow that passes as quickly as it arises.¹³⁸

The levels of research on directed energy is now large enough to support a Directed Energy (DE) Professional Society made up of private contractors and Department of Defense officials with security clearances. They have been holding high security symposiums since spring 2001 including a planned meeting set for March 2007. The following is from the Directed Energy Professional Society's website.

"The Directed Energy (DE) Systems Symposium (March 2007) will focus on systems aspects of DE in a limited-attendance environment. The Systems Symposium consists of co-located technical sessions organized by five separate conferences, with joint technical and plenary sessions to encourage discussion outside narrow technical limits. Attendance at all sessions is limited to US citizens with classified visit requests on file.

¹³⁸ This list of symptoms was compiled from material available on the website of Californians Against Human Rights Abuses (CAHRA) and can be found at www.mindjustice.org. In addition the authors conducted interviews with seven individuals who wish to have their identities protected and who presented anecdotal and physical evidence to support their assertions. There is, however, little in the public domain that conclusively states the existence of direct human manipulation by governments, militaries or private companies/researchers in the current day, MKULTRA and other historic programs notwithstanding. However, there are many organizations that seek to help these people including concerned scientists, Russian Duma members and EU parliamentarians, psychologists and academics. A list of organizations follows in Appendix A.

Symposium Highlights

Beam Control Conference
Directed Energy Modeling and Simulation Conference
Employment of Directed Energy Weapons Conference
High Energy Laser Lethality Conference
High Power Microwave Systems and Effects Conference¹³⁹

The following are three course descriptions from the October Directed Energy Conference:

Course 9.†Military Utility Analysis for DE (Direct Energy) Systems

Classification: Secret

Course Description: This course will provide an overview of military worth analysis for DE weapon systems. The course will include a description of four areas of systems engineering assessment that are brought together to form military worth analysis. These are: 1) weapon system concept performance trade studies, 2) target vulnerability assessment, 3) engagement-level system operational effectiveness assessment, and 4) war gaming and mission/campaign level analysis. Each of these areas will be covered during the short course, with emphasis on the elements that are drawn from each of these areas to support military worth analysis. The course will particularly emphasize methods for assessing system level effectiveness in the context of traditional weapon effectiveness tools such as the Joint Munitions Effectiveness Manuals (JMEMs) and for providing data on DE weapons effectiveness to mission and campaign level analysis tools and to models and simulations used to support war gaming.

Topics to be covered include:

Definition of military worth analysis
Elements of DE weapon system performance trade studies and how they feed military worth analysis
Target vulnerability assessment and its use to support weapon effectiveness
Adapting standard weapon "kill" criteria to measure benefit of DE effects
Joint Munitions Effectiveness Manuals (JMEMs) weapon effectiveness models
Military utility studies
Modeling and simulation to support war games and war fighter exercises
Mission and campaign level modeling

Course 10. Laser Lethality

Classification: Secret

¹³⁹ Directed Energy Professional Society, Monterey, CA, 19-23 March 2007, Directed Energy Modeling and Simulation Conference 2007, <http://www.deps.org/DEPSpages/DEMSconf07.html>

Course Description: This course reviews laser material interactions over parameter ranges of interest for weapons applications. Fundamental considerations of the optical coupling of the laser energy into the material will be presented. This will be followed by physics-based treatments of the response of metals, organic-based materials, and ceramics to the laser irradiation.

Metals: Simple cw, one-dimensional treatments will be utilized to illustrate the general principles of the response of metals to laser radiation, but two-dimensional cases, phase changes, and pulsed effects will be discussed as well.

Organic Based Materials: The effects of high-energy laser (HEL) radiation on organic based materials, including fiber reinforced composites, plastics and coatings will be reviewed. Materials will range from char formers and charring ablators to clean ablators. The relationship between the pyrolysis processes taking place in various materials during HEL radiation will be reviewed as a function of material composition, form and structure.

Ceramic Materials: Considerations of the response of ceramic shapes when laser loading is added to in-service stresses will be presented. An understanding of these responses from models, which are based on a combination of the thermo-mechanical stress calculations and statistically based fracture initiation, will be presented.

Course 11.†Directed Energy Bioeffects

Classification: Secret

Course Description and Topics: This course will introduce the basics of the biological effects of Directed Energy on cells, tissues, organisms, and humans, with particular emphasis on the influence of such effects on the development of use of Directed-Energy-Emitting technologies.

The student will learn about the mechanisms, resulting damage, and mission impact of laser-tissue interaction. The student will learn what tissues are most susceptible to laser damage based on wavelength, exposure duration, and irradiance. The potential mission-impact of sub0-threshold, threshold, and suprathreshold exposures will be discussed.

Student will understand the nature of RF bioeffects research, including human/animal studies, modeling and simulation, and biotechnology approaches. Students will become familiar with current state of knowledge on potential health effects RF, such as cancer, memory loss, and birth defects. Students will become familiar with basis and structure of current RF safety standards, comparison between competing standards, and how RF safety standards are applied. Students will be instructed on common RF measurement equipment and important factors for investigating potential RF overexposures.

Topics to be covered include:

Laser damage of the eye (retina and cornea)

Laser damage to the skin
Laser safety standards
Laser damage as a function of energy, pulse duration, wavelength, and spot size
RF bioeffects research and the current scientific consensus on RF hazards
RF safety standards
RF measurement basics
Investigating RF overexposures”¹⁴⁰

The US Joint Non-Lethal Weapons Directorate released a paper in 2004 which presents “Crowd Control Modeling and Simulation.” This report discusses behavioral changes human populations.¹⁴¹ That the Department of Defense calls for new weapons systems designed to work on the psychological underpinnings of a population should give human rights activists great cause for alarm. The use of electromagnetic weapons to alter the emotional state, hamper the ability of an enemy or US citizens, to think clearly, and result in chaos and pain are morally problematic for a number of reasons:

1. Creating fear, anxiety confusion and irrational behavior within an individual or a population is counterproductive to the operations of a free society and to the execution of warfare. Chaos only breeds the need for greater and greater means of physical repression; irrational behavior is by definition unpredictable and as such provides significant difficulty when the task is to secure an area.
2. These weapons leave no tell tale clues. There are no bullet holes or gross damage (with the exception of those designed to maim, burn or explode targets).
3. They are operated from a great distance, meaning that the operator has no feedback as to the effects of his or her actions. This provides us with a very dangerous circumstance very similar to Millgram's experiment where we can predict with certainty gross abuses of power.
4. Any device that invades a persons mind, either through induction of “evoked potentials” through electromagnetic means or through the various “crazy-making” tactics employed in both information warfare and psychological operations is a violation of human rights and cognitive liberty.

In terms of authorizing and administering tests of radioactive substances and other tests on unsuspecting members of the public, history shows that people without ethical standards can rise to positions of great responsibility and once ensconced in such positions of trust, produce the most horrifying abuses without fear of reprisal. When layers of secrecy overlay the activities of otherwise rational and intelligent men, the failings of their hearts more readily show. In the case of actually attempting to control human behavior through both overt and covert means our departments of defense and intelligence agencies, both subordinate to the executive branch of government have historically proven incapable of protecting the public and undeserving of the trust given them to

¹⁴⁰ Directed Energy Professional Society, *2006 Directed Energy Symposium Short Courses*, 30 October 2006 Albuquerque, New Mexico: <http://www.deps.org/DEPSpages/DEsymp06ShortCourse.html>

¹⁴¹ Louis Slesin, “Radiation Research and The Cult of Negative Results”, *Microwave News*, July 31, 2006.

perform their functions for the public good.

Total Surveillance: Cognitive Liberties vs. National Security

Today the US and the U.K. are becoming total surveillance societies in the name of national security. London, like cities across the US, is equipped with cameras citywide. Daily human actions are recorded with video and voice recognition device, while our email and computer usage is monitored. Increased demand for resources, the erosion of middle classes, war, poverty, and environmental disasters are historically factors leading to social uprisings and infiltration of political borders. As governments reinforce the threat of terror, people increasingly turn to their governments for protection.

The US has a long history of human rights violations through harassment, telephone tapping, video surveillance, behavior manipulation, torture, drug-induced states of conscience and psychological control. Congress's passage of the Military Commission Act of 2006 put universal human rights outside the scope of US policy. Today, the US government is using the most technologically advanced forms of surveillance and control, along with the propaganda of fear and intimidation against its citizens. The US engages in covert torture, covert imprisonment, increased censorship and the massive secret classification of government documents.¹⁴²

A prominent neuroscientist, Francis Crick stated in 1994, that “your joys and your sorrows, your memories and your ambitions, your sense of personal identity and free will, are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules.”¹⁴³

Is it possible that today's scientists in the employ of the US neo-conservative global-dominance policy elites believe the same? According to Steven Rose, there are, “bad hats” in neuroscience: “There are always opportunists. The current affairs of our country have produced many.”¹⁴⁴ The abundance of neuro-research has led to the development of several products by private business in the name of national security, including brain fingerprinting.¹⁴⁵

John Norseen, a neuroscientist interested in Biofusion, the relationship between humans and

¹⁴² For verification of US torturing people to death see, “US Operatives Torture Detainees to Death in Afghanistan and Iraq”, Project Censored Top 10 Uncensored Stories of 2006:

http://www.projectcensored.org/censored_2007/index.htm#7

¹⁴³ Michael Shermer, “*Astonishing Mind*: Francis Crick 1916–2004 recollections on the life of a scientist”.

¹⁴⁴ Steven Rose, *The 21st Century Brain: Explaining, Mending and Manipulating the Mind*, Jonathan Cape Publishing, March 31, 2005.

¹⁴⁵ The official explanation of Brain Fingerprinting from Dr. Lawrence Farwell: “Brain Fingerprinting testing is a scientific technique to determine whether or not specific information is stored in an individual's brain. We do this by measuring brain-wave responses to words, phrases, sounds or pictures presented by a computer. We present details about a crime, training or other types of specific knowledge, mixed in a sequence with other, irrelevant items. We use details that the person being tested would have encountered in the course of committing a crime, but that an innocent person would have no way of knowing. We can tell by the brainwave response if a person recognizes the stimulus or not. If the suspect recognizes the details of the crime, this indicates that he has a record of the crime stored in his brain.” For more research, see the Brain Wave Science site, the official internet identity of Brain Fingerprinting Laboratories at <http://www.brainwavescience.com/Publications.php>.

computers, says, "If this research pans out you can begin to manipulate what someone is thinking even before they know it." Norseen says he is agnostic on the moral ramifications of this research. He feels that he is not a "mad" scientist - just a dedicated one. "The ethics don't concern me," he says, "but they should concern someone else."¹⁴⁶

We, the authors of this report, contend that human ethics should concern every person who believes in human rights and desires control over their own mind and body. Our brains control our bodies, actions, and thought processes. If the government and the scientists they employ perceive that the human mind as simply a collection of neurons, it then becomes possible to justify the surveillance of the human mind and body for national security purposes.

The control and manipulation of a human brain is a terrifying possibility. Lieutenant Colonel Timothy L. Thomas, US Army (ret), published an article in the military journal *Parameters* which likens the mind as a new battlefield. He quotes a Russian army major in relation to mind wars, "It is completely clear that the state which is first to create such weapons will achieve incomparable superiority." Thomas expresses concern about "information dominance" though he stops short on the moral implications.¹⁴⁷

Under the cover of secrecy provided by claims of national security, researchers in service to higher circle policy elites have implanted electrodes into human subjects to control minds and tortured prisoners and the mentally ill in efforts to find better "brainwashing" techniques. They have poisoned thousands with atomic testing, experimented on young children using drugs, trauma and hypnosis, sprayed major cities with biological agents to prepare for a future attack, overthrown governments, instituted mass killings, and engaged in every form of information distortion.

The current "War on Terror" has revealed to the public some of the tools that the military has been developing for decades. High profile weapons systems flash across the nightly reports of the major news networks, including highflying Stealth bombers on grainy green tinted video from the noses of "smart" bombs. On occasion glimpses are given through the media of what one article dubbed "Wonder Weapons."¹⁴⁸ Weapons that fall under the military category of "Non-Lethal Weapons." In fact the general position of the agencies who do comment on weapons that exploit the lower end of the electromagnetic spectrum is that they have no biological effect at all, except for what are dubbed "thermal effects," in essence heating of human cells.¹⁴⁹

Research into this subject has shown that this position is inaccurate, and that the effects of electromagnetic radiation weapons on human beings are in fact both chilling and dramatic. As reported in 2001, the statement of Dr. Eldon Byrd should be considered with great weight:

¹⁴⁶ Douglas Pasternak, "John Norseen Reading your mind - and injecting smart thoughts", *US News and World Report*, January 3-10, 2000.

¹⁴⁷ Timothy L. Thomas, *The Mind Has No Firewall*, *Parameters*, Spring 1998, pp. 84-92.

¹⁴⁸ Douglas Pasternak, "Wonder Weapons", *Newsweek* August 22, 1994 p. 57.

¹⁴⁹ H. Pollack, "Epidemiologic data on American personnel in the Moscow embassy", *Bull N Y Acad Med.*, 1979 Dec;55(11):1182-6.

“A medical engineer, Eldon Byrd, reported a case that illustrates this point. After working on the Polaris submarine, which carried long-range nuclear weapons, Byrd developed non-lethal weapons with reversible effects. He regarded this as a humanitarian alternative to ‘punching holes in people and having their blood leak out’ in battle. His inventions used magnetic fields at biologically active wave frequencies to affect brain function. Byrd could put animals to sleep at a distance and influence their movements. When the success of his research became evident, suddenly he was pulled off the project and it went "black." His believes the electromagnetic resonance weapons he developed have been used for psychological control of civilians rather than for exigencies in battle. That is, to ensure his participation, he was uninformed about the true nature of the project. Byrd’s case also illustrates how morally tolerable operations may transition to morally intolerable operations, or at least rise above the atrocity line”¹⁵⁰

Power elites who fund and support efforts at supplanting the will of the people do so from on high. Their ability to redirect public attention to ward external threats and away from their own motivations in effect silences opposition to their programs. By controlling the flow of information in society, the power elites provide the public with a limited choice in all matters that pertain to machinations of government and corporate control. Given more advanced technologies for the control of information unscrupulous individuals who ascribe to a “might makes right” philosophy may will find the ways and means of employing these technologies against those who would oppose their plans. The dangers here are great, in that the individual who would direct the torture and killing of innocents is usually removed from the actual fact. It is left up to lesser authorities to administer the beatings, bullets, and mind/body bending technologies.

For the US Government to unilaterally declare that our country will not comply with international human rights laws, nor uphold the core values of our nation’s foundation is an indication of extremism that supersedes the values and beliefs of the American people. When such extremism exists we need to take seriously the founders’ declaration that, “ to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, — That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.” (Declaration of Independence 1776)

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¹⁵⁰ Military and Civilian Perspectives on the Ethics of Intelligence— Report on a Workshop at the Department of Philosophy Claremont Graduate University, September 29, 2000, Jean Maria Arrigo, Ph.D. Virginia Foundation for the Humanities and Public Policy Paper presented to The Joint Services Conference on Professional Ethics Springfield, Virginia January 25-26, 2001

this paper. Bridget Thornton is a senior level History major at Sonoma State University and the primary researcher and writer for the new EMF technologies portion. Final editing was completed by Trish Boreta with Project Censored. Special thanks to Andy Roth Ph.D. for his editorial review.

Appendix A

ORGANIZATIONS CONCERNED WITH ILLEGAL EXPERIMENTATION AND INDIVIDUAL VICTIMS

Angelic Harp Foundation

2219 Lexford LN.
Houston, Texas 77080-5216
713-461-0623
Fax: 713-461-0091
<http://angelicharpfoundation.org>

Center for Cognitive Liberty and Ethics

P.O. Box 73481
Davis, CA 95617-3481 USA
Fax: 205. 449. 3119

COPUS

Committee on the Public Understanding of Science
The Royal Society
6-9 Carlton House Terrace
London
SW1Y 5AG
United Kingdom
Fax +44 (0)20 7839 5561
<http://www.copus.org.uk>

Federation of American Scientists

1717 K St., NW Suite 209
Washington, DC 20036
Voice: (202)546-3300
Fax: (202)675-1010
<http://www.fas.org>

The Lay Institute

Nick Begich, Executive Director
Dallas, Texas
info@layinstitute.org

Mind Justice

Cheryl Welsh, Executive Director
E-mail: welsh@mindjustice.org

The Stockholm International Peace Research Institute

Signalistgatan
9 SE-169 70
Solna Sweden
Phone: +46-8-655 97 00
Fax: +46-8-655 97 33
E-mail: sipri@sipri.org

Sunshine Project Germany

The Sunshine Project
Scheplerstrasse 78
22767 Hamburg
Germany
Phone: +49 40 431 88 001
Fax: +49 40 67 50 39 88

Sunshine Project USA

PO Box 41987
Austin TX 78704
USA
Phone/Fax: +1 512 494 0545
<http://www.sunshine-project.org>

World Transhumanist Association

PO Box 128
Willington CT 06279 USA
<http://www.transhumanism.org>

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Center for Cognitive Liberties and Ethics

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