

# ***Weather Warfare: The Invisible U.S. Military Offensives in Weather Weaponry***

by Keith Harmon Snow  
July, 2002

To gain further insight into the mental illness of our leaders, and the irresponsible, catastrophic direction in which they have thrust us, consider the ongoing research, development and applications of weather warfare technologies. Adherents of weather warfare prefer to call it “environmental modification techniques” – or ENMOD. The corporate media has reported *almost* nothing about these aerospace and defense programs, or the technologies involved. Thus do I open the discussion of the ENMOD arena by deconstructing recent news stories.

First note that the Internet abounds with conspiracy theories of all stripes about weather warfare, environmental modification and climatic mayhem. Numerous postings declare the climate instabilities we are already seeing to be the work of the antichrist or the New World Order – indeed in some cases they are one and the same -- and some of these web sites describe people legitimately concerned and vocal about climatic change as the agents of a “left-wing conspiracy” with a “communist agenda” ever hostile to “free enterprise.”

Buried beneath the volumes of imaginative but wholly fictitious conspiracies that gain wide circulation however, are the many legitimate secret programs orchestrated behind the darkness and denial of the military-industrial complex. Call these conspiracies if you like. This story – weather as a weapon – is certainly not one of them and, depending on how you look at it, this is certainly one of them.

## ***The Fog Watch (Propaganda):<sup>[1]</sup>***

Throughout April, 2002, Amherst College (MA) radio (WAMH) ran a series of public service announcements (PSAs) sponsored by a Christian church organization declaring the existence of weather modification technologies, and advocating that listeners contact the U.S. government to demand that these technologies be deployed to moderate the extreme weather and drought we are seeing. According to these PSAs, the government use of these existing technologies to mitigate hostile weather is a fundamental right of every U.S. citizen.<sup>[2]</sup>

On February 17, 2002, ABC News ran a very brief “news” clip titled “Weather As A Weapon?” The inquisitive title infers that this is some not-yet-certain possibility, contributing to the delusional beliefs that weather warfare might be something we – the public – ought to at least be thinking about, and possibly debating. ABC would never have run the story without some greater purpose than simply “to keep the public

informed” -- the expected role of the democratic free press that ABC purports to be part of.<sup>[3]</sup>

The article describes the advantages of weather modification: seeding clouds, creating rain or tornadoes over hostiles forces, burning through fog to expose enemy aircraft:

**Consider what might happen on some battlefield of the future where the U.S. military could gain a tactical advantage by changing the weather. There are several ways they might try to do that. One way would be to create rain that turns battlefields into mud baths in order to immobilize enemy troops and enemies. Another is by triggering lightning storms over airfields to keep hostile aircraft on the ground. Yet another possibility would be to burn through a heavy fog by firing lasers to give U.S. fighter pilots a better view of enemy targets. An Air Force research paper called “Owning the Weather in 2025” predicts that weather modification could reshape battlefields.**<sup>[4]</sup>

Weather warfare, of course, is set in some amorphous *future* battlespace. There is ABC’s first deception. ABC draws attention to the Air Force document *Owning the Weather in 2025*. This is an unclassified document, accessible to the public, and it suggests that ENMOD research and development is all mere theory and speculation.

*Owning the Weather in 2025* appears on its face to reveal significant details about the nature of U.S. national security and defense capabilities. However, in the age of international *terrorism*, with the U.S. military and its multinational corporations and their media minions whipping up a frenzy about terrorists of all stripes, anthrax scares and world trade massacres -- *and with rapid information access and exchange making such reports available to hordes of uncivilized information-seeking barbarians feared by the Pentagon* -- we can be sure that this document shows us only what we are intended to see.

*Owning the Weather in 2025* serves the greater purpose of exposing only what is efficacious to the military, to the intelligence apparatus, to the companies they are in league with, and to the compromised policymakers seeking public support – by any means -- for the military programs they are paid to peddle. That is ABC’s second deception: steering interested readers toward an inversion of reality, a public relations document, officially sanctioned, released and posted by the military. ABC does not question the origins of this document, or why it has suddenly come into vogue.

ABC confirms that weather warfare is, at the very least, under development: the article closes noting that substantial ongoing investments in research and development have continued.

**In the U.S. and in many other countries, the private sector continues to work on weather modification technology — work that could also be used on the battlefield. And as this research continues on, for example, cloud seeding techniques that produce heavy rain to help farmers in time of drought or laser technology that could clear heavy fog for passenger jets, the military is watching.<sup>[5]</sup>**

To say that the military is “*watching*” is to lie outright. There is ABC’s third deception: as I will imminently show, the military has funded and sponsored these weather warfare technologies for over fifty years. ABC’s fourth deception is the suggestion that the private sector and the government defense sector are independent, that one does not wash the hand, or wipe the ass, of the other. Nothing could be further from the truth.

The fifth deception by ABC News is the suggestion that these life and earth destroying technologies – pursued with a scientific hubris that is psychotic and obscene -- will also serve peaceful uses. Indeed, given the industrial acceleration of climatic mayhem we can be sure that the public will be clamoring for these weather modification technologies. The further suggestion is that their military adaptability is an afterthought, rather than their *raison d’etre*. That is ABC’s sixth deception.

Naturally, weather modification tools will revive gardens of sunflowers and fields of wheat stricken by drought, and they will guide passenger jets full of innocent people (!) to safety. By implication, these weather modification technologies are essential to human survival, they will never be used unjustly, they are as benign as atoms for peace. Such arguments about the ENMOD arena will increasingly proliferate with great media fanfare, serving the intended purpose of manipulating the public mind, as information about ENMOD technologies is slowly and strategically transitioned out of the (classified) closet.

Indeed, the public has paid hundreds of millions of dollars, at least -- and it is most likely billions -- to develop these technologies – a fact that ABC does not share -- so we might as well see them put to good use. Hiding the proliferation of public subsidies for weather warfare is ABC’s seventh deception.

The main purpose of the ABC article – and the WAMH public service announcement – is to introduce a new subject heretofore forbidden by the military and, its extension, the corporate media. These articles signal the beginnings of a propaganda campaign to habituate citizens to a happy, un-dissenting coexistence with weather warfare technology. That is ABC’s eighth deception.

The deeper purpose of the ABC “news” clip – the ninth deception -- is to garner support from U.S. citizens to withdraw from – to denounce, evade or trample on – an international treaty prohibiting environmental warfare, signed by the U.S. in the 1970’s.

Thus does the bold and colorful subtitle, and the paragraph that follows, elucidate the central theme of the ABC article: “AGREEMENT BARS WEATHER MANIPULATION.”

**But there is a problem turning theory into fact. Using weather as a weapon is a clear violation of international agreements. In 1977, the United Nations passed, and the U.S. signed, a resolution that prohibits changing the weather for hostile purposes on the grounds that too many civilians could be harmed. So the U.S. military, which once seeded clouds in Vietnam to produce heavy rains along the Ho Chi Minh trail, can now only concentrate on better weather forecasting. “We want to anticipate and exploit the weather, not modify it,” says U.S. Air Force Director of Weather Brig. Gen. Fred Lewis.**

There is no problem turning fact into propaganda: some ENMOD technologies have been tested and, as reported elsewhere, used in battle already. It has been reported for example that weather warfare technologies cleared the skies to enable NATO carpet-bombing of Serbia – causing unprecedented, widespread, long-lasting droughts.<sup>[6]</sup> So there is ABC’s tenth deception. In contradistinction to the suggestions by ABC News, we are not talking about merely seeding a few clouds. Here are the eleventh, twelfth and thirteenth deceptions: ABC News hides the scale, magnitude and lethal capabilities of ENMOD weaponry.

The United States is party to an arms control treaty known as the “Convention on the Prohibition of Military or Other Hostile Use of Environmental Modification Techniques” (ENMOD Treaty), ratified in 1980.<sup>[7]</sup> We do not know why the U.S. signed this treaty in 1977, but we can be at least 95 % certain that the Nixon/Ford administrations did not do so out of concern that “too many civilians could be harmed.” There is ABC’s fourteenth deception.

In the wake of the 1970s’ U.S. Senate Select Intelligence Committee hearings on covert actions, the broad spectrum of political assassinations, coups, secret operations and technology developments deemed essential to the national security apparatus were driven underground in highly classified programs.<sup>[8]</sup> Just as the assassinations, coups and covert operations never stopped, the programs to develop weather warfare continued. Undoubtedly, the U.S. signed the 1977 ENMOD Treaty for cosmetic purposes only.

ABC quotes Air Force Director of Weather Brig. Gen. Fred Lewis, and choosing this person as the sole authority allowed to speak on the U.S. military’s weather warfare capabilities is ABC’s fifteenth deception. Brigadier Generals are credible enough, and he utters some truth, and ABC does not question this truth.

“We want to anticipate and exploit the weather, not modify it,” says U.S. Air Force Director of Weather Brig. Gen. Fred Lewis.

It is a curious statement, in the context it is in, because it is defensive at its core. It is a direct lie. Significant evidence suggests that somewhere in the national security apparatus – DOD, DOE, NSA, CIA, DIA, FBI, or deeper – there are ongoing, intensive programs in ENMOD technology. Indeed, the highly invisible U.S. National Reconnaissance Office – which feeds the National Security Agency and the Central Intelligence Agency -- might be the culprit: the NRO plans, builds and operates America’s spy satellites, and they specialize in intelligence-gathering and information warfare.

As I will show, the entire subject of weather warfare revolves around “plausible deniability” and the capacity of elite decision makers to “plausibly deny” that such technologies exist (just as assassinations were not committed, coups not fomented, massacres not perpetrated). Because proof of secret operations is highly classified, hence invisible, the unverifiable accusations are answered with *plausible* denials.

The statement by Brig. General Fred Lewis is contradicted, in its most simple form, by the obvious fact that all branches of the U.S. military and security apparatus rely on sophisticated SIGINT (signal intelligence), COMINT (communications intelligence), C4I (command, control, communication, computing and intelligence) and EW (electronic warfare) technologies whose entire mission and purpose can be, and often has been, compromised, neutralized or entirely defeated by weather conditions in the *battlespace* environment.<sup>[9]</sup>

The statement is further contradicted by the obvious military thrusts to develop capabilities that maximize stealth and, simultaneously, minimize risk to U.S. troops, and the propensity, again well documented, to use clandestine operations premised, again, on “plausible denial.” In light of these major policy and field objectives, the existence of an entire *spectrum* or *portfolio* of ENMOD technologies is both plausible and certain. Said differently, it is *irrational*, and *unlikely*, and *naïve*, and *unreasonable* to suppose the absence of these technologies.

*Owning the Weather in 2025*, advertised by ABC News, confirms the *offensive* interests the U.S. Air Force has in “owning and controlling” the weather through warfare. (Projected ENMOD capabilities are delineated in Table 1.) Numerous citations and references reveal that military analysts and scientists have been working on weather modification issues in some capacities.

**Air Force 2025: Table 1 - Operational Capabilities Matrix**

|  |  |
|--|--|
| <b>DEGRADE ENEMY FORCES</b>              | <b>ENHANCE FRIENDLY FORCES</b>           |
| <b>Precipitation Enhancement</b>         | <b>Precipitation Avoidance</b>           |
| - Flood Lines of Communication           | - Maintain/Improve LOC                   |
| - Reduce PGM/Recce Effectiveness         | - Maintain Visibility                    |
| - Decrease Comfort Level/Morale          | - Maintain Comfort Level/Morale          |
| <b>Storm Enhancement</b>                 | <b>Storm Modification</b>                |
| - Deny Operations                        | - Choose Battlespace Environment         |
| <b>Precipitation Denial</b>              | <b>Space Weather</b>                     |
| - Deny Fresh Water                       | - Improve Communication Reliability      |
| -- Induce Drought                        | - Intercept Enemy Transmissions          |
| <b>Space Weather</b>                     | - Revitalize Space Assets                |
| - Disrupt Communications/Radar           | <b>Fog and Cloud Generation</b>          |
| - Disable/Destroy Space Assets           | - Increase Concealment                   |
| <b>Fog and Cloud Removal</b>             | <b>Fog and Cloud Removal</b>             |
| - Deny Concealment                       | - Maintain Airfield Operations           |
| - Increase Vulnerability to PGM/Recce    | - Enhance PGM Effectiveness              |
| <b>Detect Hostile Weather Activities</b> | <b>Defend against Enemy Capabilities</b> |

*Owning The Weather in 2025* is but one chapter of the much larger report *Air Force 2025*, but ABC News did not report on that, nor did they explore the obvious evidence of the military’s comprehensive embracement of ENMOD technologies. That is ABC’s seventeenth deception.

*Air Force 2025* is a significant document. It outlines diverse technologies and strategies that the Air Force feels it must adopt to prevent the Air Force from ushering in its own extinction by 2025. The following excerpts from the *Air Force 2025* shed some light on the intentions of the Air Force, and call into question the credibility of -- “We want to anticipate and exploit the weather, not modify it” -- Air Force Director of Weather Brig. Gen. Fred Lewis:

**“2025 is a study designed to comply with a directive from the chief of staff of the Air Force to examine the concepts, capabilities, and technologies the United States will require to remain the dominant air and space force in the future.” <sup>[10]</sup>**

**“In 2025, uninhabited aerospace vehicles (UAV) are routinely used for weather modification operations... Prior to the attack, which is coordinated with forecasted weather conditions, the UAVs begin cloud generation and seeding operations. UAVs disperse a cirrus shield to deny enemy visual and infrared surveillance.”**

**It [weather modification] would also include specific intervention tools and technologies, some of which already exist and others which must be developed. Some of these proposed tools are described in the following chapter titled Concept of Operations. The total weather-modification process would be a real-time loop of continuous, appropriate, measured interventions, and feedback capable of producing desired weather behavior.**

**If precipitation enhancement techniques are successfully developed and the right natural conditions also exist, we must also be able to disperse carbon dust into the desired location... Numerous dispersal techniques have already been studied, but the most convenient, safe, and cost-effective method discussed is the use of afterburner-type jet engines to generate carbon particles while flying through the targeted air. If this UAV technology were combined with stealth and carbon dust technologies, the result could be a UAV aircraft invisible to radar while en route to the targeted area, which could spontaneously create carbon dust in any location.**

**Recent army research lab experiments have demonstrated the feasibility of generating fog.<sup>[11]</sup>**

**It is important to note that many techniques to modify the upper atmosphere have been successfully demonstrated experimentally. Ground-based modification techniques employed by the [Former Soviet Union] include**

**vertical HF heating, oblique HF heating, microwave heating, and magnetospheric modification. Significant military applications of such operations include low frequency (LF) communication production, HF ducted communications, and creation of an artificial ionosphere. Moreover, developing countries also recognize the benefit of ionospheric modification: “in the early 1980’s, Brazil conducted an experiment to modify the ionosphere by chemical injection.”**

*Air Force 2025* is, in theory, a roadmap to the future. It closes with a passionate and glowingly patriotic section outlining the coming extinction of the Air Force, and, indeed, the entire United States itself, if critical technologies, environments, personnel and capabilities outlined in *Air Force 2025* are not exploited absolutely.

Of course, without any further qualification or investigation by ABC News, and fed by ABC only the simplest of ideas to ensure that they are digested by the public, the casual reader is unable to separate the truth from the lie. ABC’s eighteenth deception comes in allowing the lie to pass. Neither does ABC News balance the newly enshrined truth with any alternative views, or counter quotes, or dissenting opinions -- as if dissenters and their rationales did not exist at all. ABC has not reported on the proliferation of, or the dissenting scientific views on, or the risks of, these technologies – military *or* civilian. That is ABC News’ nineteenth deception.

The ABC News “news” clip -- sympathetic to a military establishment ostensibly plagued by budget cuts and federal oversights and shackled by international legal treaties -- helps further the misinformation that the military, “which once seeded clouds in Vietnam to produce heavy rains along the Ho Chi Minh Trail, can now only concentrate on better weather forecasting.” There is ABC’s twentieth deception – the unfortunate U.S. military, its hands tied, “can now only concentrate on better weather forecasting.” Here we find a common media ploy: to help generate sympathy for a military and intelligence apparatus ostensibly shackled by its own government and people – in sharp contradistinction to egregious, brutal, comprehensive U.S. military force and power wielded with secrecy and impunity around the globe, with a budget that is obscene.

For their twenty-first deception, ABC News has casually introduced the idea that, well, by the way, weather warfare has been used before, in Vietnam.<sup>[12]</sup> However, this is unappreciated, primarily because it has been little reported – if reported at all -- by the corporate U.S. media. The CIA, FBI and other “national security” institutions regularly utilize this same propaganda ruse to deflect attention from secret operations, torture and state-legitimized terrorism. The method is simple: begin circulating previously unreported facts to lay the groundwork for public acceptance, and then, if challenged,



shrug the information off as “old news” that is “common public knowledge.” In any event -- we are always assured -- the institution in question (CIA) has long since reformed.<sup>[13]</sup>

### ***Weather Warfare Realities:***

As early as the late 1940's Dr. Wilhelm Reich was developing weather modification techniques at his Orgonon Research Center in Rangeley, Maine. Reich was sharing his work with the U.S. Department of Defense, unaware that he was being targeted as a subversive for his pioneering futuristic work in numerous fields, weather included. (The U.S. Food and Drug Administration imprisoned Reich in 1954 for a minor interstate transportation infraction committed by an employee: Reich died in federal prison in 1957.)

By 1952 the White House had a special adviser on weather modification. In 1957 the President's advisory committee on weather control explicitly recognized the military potential of weather modification, warning in their report that it could become a more important weapon than the atom bomb.<sup>[14]</sup>

In 1968, Professor Gordon J.F. McDonald, a member of President Lyndon Johnson's Science Advisory Committee, elaborated in great detail on the state-of-the-knowledge weather modification technologies in a book chapter called “How To Wreck the Environment.”

“The key to geophysical warfare,” McDonald wrote, “is the identification of the environmental instabilities to which the addition of a small amount of energy would release vastly greater amounts of energy.”<sup>[15]</sup>

McDonald describes large field programs on weather modification, and he elaborates on the scientific knowledge and the capacity for the military to hide ENMOD operations behind environmental chaos. This raises questions about whether the military has facilitated climatic mayhem – no matter the active or passive means -- to provide a permanent shield behind which to secretly operate. (Blocking and stalling on climate treaties is one such means.)

McDonald bemoans the potential to mask offensive ENMOD operations under nature's irregularities, where an “operation could be concealed by the statistical irregularity of the atmosphere... A nation possessing superior technology in environmental manipulation could damage an adversary without revealing its intent.”<sup>[16]</sup>

McDonald's detailed discussions of manipulating Antarctica's ice sheets raise questions about the possible military / scientific role in promoting the recent substantial Antarctic ice shelf fractures and the unprecedented shattering of icebergs, heretofore scientifically unknown.<sup>[17]</sup> One could imagine that Very Low Frequency (VLF) waves propagated by submarines or other high-energy transmitters might be responsible. The U.S. Navy is

certainly capable of irresponsible high-energy submarine testing: the U.S. Navy recently confirmed, for example, that high-energy, low-frequency sonar experiments have killed humpback whales.<sup>[18]</sup>

Another possibility is that downscaled thermonuclear devices have been tested in remote ice core experiments in Antarctica: McDonald addresses this potential scenario. Curiously, the military, since the World Trade center attacks, has stepped up its public relations campaign focused on the supposed necessity of detonating small-scale thermonuclear devices. It is not unlikely that high-energy and directed-energy weapons -- nuclear or otherwise -- are being sporadically tested beyond public or institutional oversight. Indeed, as we will see below, it appears that high-energy weapons have already been developed and tested under the High-frequency Active Aural Research Program (HAARP).

World renowned scientist Dr. Rosalie Bertell today confirms that “US military scientists ... are working on weather systems as a potential weapon. The methods include the enhancing of storms and the diverting of vapor-rivers in the Earth's atmosphere to produce targeted droughts or floods.”<sup>[19]</sup> As noted in Air Force 2025, “recent army research lab experiments have demonstrated the feasibility of generating fog.”<sup>[20]</sup> Similarly, research has been conducted in precipitation modification for decades.<sup>[21]</sup>

Former French military officer Marc Filterman outlines several types of contemporary “unconventional weapons” using radio frequencies. He refers to “weather war,” indicating that the U.S. and the Soviet Union had already “mastered the know-how needed to unleash sudden climate changes (hurricanes, drought) in the early 1980s.” These technologies make it “possible to trigger atmospheric disturbances by using Extremely Low Frequency (ELF) radar [waves].”<sup>[22]</sup>

In *Benign Weather Modification*, published March 1997, Air Force Major Barry B. Coble superficially documents the existence of weather modification science -- here is the curious phenomenon of unclassified revelations once again -- and he traces the developments that have occurred, notably, in the hands of the Pentagon and CIA's staunchest ideological enemies:

**“The first scientifically controlled and monitored effort generally recognized by the meteorological community as constituting weather modification occurred in 1948,” he writes, “when Dr. Irving Langmuir first experimented with artificially seeding clouds in order to produce rain. His experiments showed positive results, sparking tremendous interest in the field nearly overnight.”<sup>[23]</sup>**

**Many countries throughout the world practice weather modification. The Russians have long**

**been interested in using weather modification as a way to control hail.<sup>[24]</sup> The Chinese recognize the value of weather modification and believe, incorrectly, that the US military continues to use weather as a weapon.<sup>[25]</sup>**

**However, there is little available evidence showing active efforts by other countries to use weather modification for military use. The US military, especially the Air Force, is considered the preeminent world leader in technology and its applications in the battle space. Since the late 1970s, the Air Force has “backed away” from pursuing weather modification technology even though the scientific understanding and the technological capability have evolved, albeit slowly, over time. It is a well-known fact that weather affects the battle space, contributing to the “fog of war.” New developments in the field of weather modification may help eliminate some of this "fog" and turn weather into a force multiplier.<sup>[26]</sup>**

Are we to believe that the U.S. national security apparatus ceased all weather modification research even as the ever *hostile* and *encircling* communist RED enemies pursued this research emphatically? Apparently so: Coble elaborates on the absence of any U.S. military role in weather modification developments.

**DOD funding for weather modification research peaked at \$2.8 million in 1977. Funding was eliminated in 1979. Since then there has been no active research effort into weather modification by DOD. The Air Force spends no money on research, and there is no effort to monitor civilian research, applications and advancements. The Army's program, “Owning the Weather for the Battlefield,” deals only with incorporating weather information into the digitized battlefield of the future. Efforts to modify the weather for battle are not being pursued.<sup>[27]</sup>**

After this rather auspicious paragraph denying any U.S.A.F. or U.S. DOD interest or involvement in ENMOD technologies, Coble goes on and eventually identifies existing “benign weather modification” technologies under development. He specifically notes at

one point that government research in benign weather modification, which in the beginning he adamantly denied, continues:

**Each of these weather modification types has commercial applications, and several companies exist to practice these types of Benign Weather Modification. US government-sponsored BWM research, however, is on the decline. Annual government funding (both state and federal) peaked in FY77 at \$19 million. In 1992 the funding level fell to \$5 million.<sup>[28]</sup>**

What are we to make of these contradictory statements? Plausible denial? The author earlier emphatically rejected all military development of ENMOD technologies whatsoever. This rejection came in the statements: “Since [1979] there has been no active research effort into weather modification by DOD;” and “The Air Force spends no money on research, and there is no effort to monitor civilian research, applications and advancements.” The author has led us through a maze of contradictions. There is ongoing development, it is outlined to some extent in this unclassified report, and in 1992 the annual government funding level fell to \$5 million! Naturally, as we are always reminded by the military, the funding is *on the decline*.

What kind of funding occurred from 1979 to 1992? What kind of funding occurred, and occurs now, under the darkest and most secretive “black” programs of the U.S. national security apparatus? E-Systems is one of the biggest intelligence contractors in the world - - doing work for the CIA, defense intelligence organizations and others -- and \$1.8 billion of their annual sales are to these organizations, with \$800 million for black projects -- projects so secret that even the United States Congress isn't told how the money is being spent.<sup>[29]</sup>

Another curious but oblique potential admission of the existence of these ENMOD weapons technologies can be found in Chairman of the Joint Chiefs of Staff Instruction. In this 1998 Air Force document delineating the chain-of-command policies on “Meteorological and Oceanographic Operations,” the Air Force states:

**“The United States occasionally receives requests for assistance with weather modification operations in foreign nations, some of which are proposed initially to U.S. military commands or agencies located in those nations. In the event foreign nations or international organizations request assistance with weather modifications, they should be informed to forward their request through diplomatic channels to the Department of State. No encouragement or commitment should be**

**indicated by the receiving military organization.”<sup>[30]</sup>**

Are the governments or intelligence networks of other countries informed about U.S. ENMOD capabilities? (Given that the United States has installed many third world governments, with U.S. military trained personnel, it is highly likely.) What has brought these requests about? Is there anything suspect about a statement that declares: “No encouragement or commitment should be indicated...?” Is it merely anecdotal that the Department of Defense is providing guidance as recent as 1998 on what to do if countries request U.S. assistance on weather modification operations?

As I will try to show below, the military directive above is designed to help maintain the highest levels of security around ENMOD capabilities – a.k.a. devastating weather weaponry -- which are very real, and, it would seem, available for select allied deployments or missions as determined at the highest levels of the U.S. State Department.

### ***Stealth, Deception and Death: Unmanned Aerospace & Aerial Vehicles (UAVs):***

We can begin our assessment of the state of ENMOD technologies by narrowly addressing just one area related to ENMOD technology deployments: Unmanned Aerospace Vehicles and Unmanned Aerial Vehicles (UAVs). Later I will transition to a discussion of other ENMOD and weather weapons, and to the evidence for their existence.

Unmanned Aerospace Vehicle and Unmanned Aerial Vehicle (UAV) research, development and applications are a billions of dollars industry. Consider that early in 2002, U.S. Secretary of War Donald Rumsfeld added over \$1 billion to the fiscal 2003 defense budget request to develop certain promising Unmanned Aerospace Vehicle (UAV) programs. (This UAV development is slated to occur with complete transparency: thus these appropriations do not account for secret programs and decades of previous UAV research and developments, or for current and future ongoing UAV development, under top-secret *black* programs.)

Unmanned Aerospace Vehicle developments appear to have had their genesis in the V-1 and V-2 rocket programs of NAZI-American war machine.<sup>[31]</sup> Further refined interests appear to have spun out of the 1950's CIA development of a lightweight STOL (short-takeoff-and-landing) aircraft, the human-piloted Helio Courier. Developed by a contractor in Norwood, Massachusetts, the Helio Courier was first utilized by Christian missionaries and other CIA front groups furthering secretive and genocidal Rockefeller interests (Chase Manhattan & Standard Oil) in Latin America in 1959. This remarkable CIA/NSA “asset” was kept secret for three decades.<sup>[32]</sup>

Today, visible in the unclassified arena alone, there are small fleets of UAVs of varying capacities already in service. The U.S. military has over 200 UAVs of all types today.

Others are under development. Consider that all branches of the military currently deploy UAVs with sophisticated SIGINT, COMINT, C4I, EW and ADP (Air-Delivered Payloads) capabilities.<sup>[33]</sup> The U.S. Army Tactical Unmanned Aerial Vehicle (TUAV) and the U.S. Air Force *Global Hawk* and *Predator* UAVs saw significant operational deployment in the war on Afghanistan, and they are part of a major array of weapons-bearing UAV-type systems slated to deploy various payloads sporting weather warfare technologies.<sup>[34]</sup> *Predator* was also deployed over Bosnia.<sup>[35]</sup>

Not coincidentally, UAVs are amongst the platforms consistently used to deploy and test some of the ongoing weather sensors and weapons pursued in unclassified technology research and development programs geared toward the Strategic Defense Initiative (SDI). Virtually all of these programs, on their face, are described as weather analysis, data collection and research, and, to be fair, those applications certainly exist. However, it is disingenuous to dismiss the military applications, given the funding sources and the many aerospace and defense programs already using these technologies in one way or another. Indeed, this area revolves around highly lethal and *offensive* military capabilities.

The Microwave Remote Sensing Laboratory (MIRSL) at the University of Massachusetts has for seventeen years pioneered the research and development of sophisticated sensors, radars, receivers, transmitters, antennas and systems for weather investigation, and ultimately, to enable weather modification and control. Virtually all of the technologies were developed under funding by the military industrial complex.<sup>[36]</sup> (Until the late 1980's, at least, classified research occurred at UMass.) MIRSL personnel regularly staff flights and tests deploying weather monitoring (clouds, ocean waves, hurricanes, atmospheric) and measuring equipment.

The MIRSL expertise focuses on microwave and millimeter wave technologies for RADAR, communications and EW applications. These MIRSL enabled technologies are also deployed for EW, SIGINT, COMMINT, and C4I capabilities. These technologies have seen direct applications, in repeated tests and experiments, and they are the technologies of current choice in use in the armed forces, and of future choice for an array of offensive capabilities identified in the unclassified *Air Force 2025* document.

Granting agencies to UMass in the recent past have included: NASA; Office of Naval Research; Department of Energy; National Oceanic and Atmospheric Administration; Department of Agriculture; Defense Advanced Research Projects Agency. Working with the UMass MIRSL scientists on these programs are also: General Electric, Ball Brothers, Digital Equipment, Hewlett-Packard, Hughes, Quadrant Engineering, Lockheed-Martin, Sun Microsystems and United Technologies. Massachusetts's contractors involved at various levels include Raytheon, Kollmorgen, Millitech and Yankee Environmental Systems.<sup>[37]</sup>

Danaher Corporation -- the parent company of Kollmorgen -- is a major contractor, with over 30 subsidiaries, involved in significant aerospace, defense and SDI, programs. Danaher director Alan G. Spoon is President of the Washington Post.<sup>[38]</sup>

The UMass MIRSL research is aligned with the U.S. Department of Defense Atmospheric Radiation Measurement-Unmanned Aerospace Vehicle (ARM-UAV) Program – another program euphemistically dedicated to “atmospheric measuring and monitoring.” The ARM-UAV program was made visible in the mid-1990’s (we cannot verify when it actually began) with millions of dollars in funding from the DOD Strategic Environment Research and Development Program (SERDP). SERDP continues to fund UAV and satellite platform technology developments for the AMR-UAV program of the U.S. Department of Energy. The U.S. DOE in turn has funded the University of Massachusetts MIRSL program.<sup>[39]</sup> Further ENMOD related research and development has been sponsored through NASA (ERAST) programs.<sup>[40]</sup>

### ***StrikeStar:***

The obvious extension of benign weather modification UAV developments is to expand UAV use to include lethal missions. Indeed, by 2025 – were we inclined to suppose that it has not already been achieved in its full or partial capability today -- the Air Force intends to deploy the *StrikeStar* UAVs. The StrikeStar is “a stealthy UAV that will be able to loiter over an area of operations for 24 hours at a range of 3,700 miles from launch base while carrying a payload of all-weather, precision weapons capable of various effects.”<sup>[41]</sup>

However, as described below, StrikeStar’s predecessors are numerous and sophisticated, and they are also engineered for lethal missions. These are very real, existing UAV “drones” and their coming dominance was secured through “Star Wars” media films that massaged and prepared the public mind to accept and tolerate such lethal and unnecessary futuristic weaponry.

**The Tier II, medium altitude endurance (MAE) UAV, also called Predator, is manufactured by General Atomics Aeronautical Systems and costs about \$3.2 million per aircraft. The Predator first deployed to Bosnia in 1994 and has since returned there with two combat-related losses.**

**A higher performance vehicle is the Teledyne Ryan Aeronautical Conventional High Altitude Endurance (CHAE) UAV. Referred to as the Tier II+, or Global Hawk, it is designed to fulfill a post-Desert Storm requirement Tier II+ is scheduled to fly in late 1997 and meet a price requirement of \$10 million per unit.**

**The low observable high altitude endurance (LOHAE) UAV (Tier III- or DarkStar) is the**

**final member of the... family of endurance UAVs. Manufactured by Lockheed-Martin/Boeing, DarkStar is designed to image well protected, high-value targets with either SAR [synthetic aperture radar] or EO [electro-optical] sensors. This UAV is designed to meet a \$10 million per aircraft unit flyaway price.**

**StrikeStar will give the war fighter a weapon with the capability to linger for 24 hours over a battlespace 3,700 miles away, and, in a precise manner, destroy or cause other desired effects over that space at will. Bomb damage assessment will occur nearly instantaneously and restrike will occur as quickly as the decision to strike can be made. StrikeStar will allow continuous coverage of the desired battlespace with a variety of precision weapons of various effects that can result in "air occupation"-the ability of *aerospacepower* to continuously control the environment of the area into which it is projected.**

**StrikeStar's utility in the performing any future missions would be limited only by its combat payload capacity and this limitation will be offset by revolutions in weapons technology that include light-weight, high-explosive, and directed-energy technologies.**

**Not only could a StrikeStar hold the enemy at risk, it could produce unparalleled psychological effects through shock and surprise. In the words of Gen Ronald Fogleman, Chief of Staff, United States Air Force, "So, from the sky in the aerospace medium, we will be able to converge on a multitude of targets. The impact will be the classic way you win battles-with shock and surprise."**

**A *StrikeStar* could produce physical and psychological shock by dominating the fourth dimension -- time. Future CINCs could control the combat tempo at every level. Imagine the potential effect on enemies who will be unable**



**to predict where the next blow will fall and may be powerless to defend against it.**

**A final task, well suited to a *StrikeStar*, would be covert action against trans-national threats located in politically denied territory or in situations where plausible deniability is imperative. Because of a *StrikeStar*'s endurance, altitude, and stealth characteristics, it could wait, undetected, over a specific area and eliminate targets upon receiving intelligence cues. If required for plausible deniability, specialized weapons could be used to erase any US fingerprint. Uniquely suited to a *StrikeStar* would be delivery of high-kinetic-energy penetrating weapons.<sup>[42]</sup>**

Recalling that we have greatly narrowed the scope of our assessment into the military interests of ENMOD developments to focus on UAV capabilities, we now have evidence that these technologies will be used for *covert action* missions where *specialized weapons could be used to erase any US fingerprint* to insure *plausible deniability*.

*Air Force 2025* has an entire chapter dedicated to secretive Special Operations Forces and covert operations. (Recall that these operations are accountable to no one; they perpetuate terror as a means of social control; they are amongst America's most egregious examples of instruments of state power hostile to life, liberty and the pursuit of happiness.<sup>[43]</sup>) While impossible to verify, most likely UAVs carrying ENMOD technologies in various states of development have already been deployed on covert operations.

These drones have multiple secret, lethal and "benign" operational capabilities. UAV purchase costs alone, ignoring the monstrously high but incalculable research and development costs paid by U.S. taxpayers, range from \$1 million to \$20 million per unit.<sup>[44]</sup>

Many of these UAVs –will carry radars, passive and active antennas, electro-optical (EO) devices and systems, phased array systems, and sophisticated weather data banks, all fundamentally enabled through the intellectual resources, and the computational, theoretical and applied research programs of the University of Massachusetts MIRSL laboratories.<sup>[45]</sup> Numerous other major aerospaceborne weapons and intelligence platforms also utilize technologies enabled by MIRSL students and scientists.

Most of these UAV configurations will deploy some level of active and lethal ENMOD capabilities. As revealed above, payloads will also include "directed energy weapons." As we will see below, these are another means by which environmental warfare can and will be waged.

It is important here to pause and recall that military strategists and leadership, in their reports and their direct quotes – as previously delineated above – have emphatically denied the existence and military interest in even the most “benign weather modification” (BWM) technologies. That is the point of departure from which to assess the monumental scale and complexity of the weather warfare deceptions.

To reiterate, the UAV section above offers one fraction of insight into the nature of the secret ENMOD developments under pursuit by the national security apparatus. What follows is further evidence from the most widely publicized case on record.

### **Angels Don't Play This HARPP** <sup>[46]</sup>

Between August and September 1958, the US Navy exploded three fission type nuclear bombs 480 km above the South Atlantic Ocean, in the part of the lower Van Allen Belt, closest to the earth's surface. In addition, two hydrogen bombs were detonated 160 km over Johnston Island in the Pacific. The military called this “the biggest scientific experiment ever undertaken.”

**Designed by the US Department of Defense and the US Atomic Energy Commission, and code named “Project Argus,” this gigantic experiment created new (inner) magnetic radiation belts encompassing almost the whole earth, and injected sufficient electrons and other energetic particles into the ionosphere to cause worldwide effects. The electrons traveled back and forth along magnetic force lines, causing an artificial “aurora” when striking the atmosphere near the North Pole.** <sup>[47]</sup>

These pioneering experiments were the first of many – some of which are ongoing today.

Project Argus (1958)  
Project Starfish (1962)  
SPS: Solar Power Satellite Project (1968)  
Project Popeye (1960's and 1970's)  
Saturn V Rocket (1975)  
SPS Military Implications (1978)  
Orbit Maneuvering System (1981)  
Innovative Shuttle Experiments (1985 to present)  
Mighty Oaks (1986)  
Desert Storm (1991)  
High Frequency Active Auroral Research Program, HAARP (1993 to present)

## Poker Flat Rocket Launch (1968 to present)

Their details are readily available. Perhaps the most comprehensively documented however is the High Frequency Active Auroral Research Program – HAARP – investigated in detail and documented in the book Angels Don't Play This HAARP. This huge experiment being conducted in Alaska uses very large arrays of transmitters and receivers to generate energy beamed into the upper atmosphere. (The research will be briefly summarized here.) According to authors Nick Begich and Jeane Manning:

**HAARP will zap the upper atmosphere with a focused and steerable electromagnetic beam. It is an advanced model of an `ionospheric heater.' (The ionosphere is the electrically charged sphere surrounding Earth's upper atmosphere. It ranges between about 40 to 600 miles above Earth's surface.)**

**Angels Don't Play This HAARP cites an expert who says the military studied both lasers and chemicals that they figured could damage the ozone layer over an enemy. Looking at ways to cause earthquakes, as well as to detect them, was part of the project named Prime Argus, decades ago. The money for that came from the Defense Advanced Research Projects Agency (DARPA, now under the acronym ARPA.)**

**In 1994 the Air Force revealed its Spacecast 2020 master plan, which includes weather control. Scientists have experimented with weather control since the 1940's, but Spacecast 2020 noted that “using environmental modification techniques to destroy, damage or injure another state are prohibited.” Having said that, the Air Force claimed that advances in technology “compels a reexamination of this sensitive and potentially risky topic.” <sup>1481</sup>**

According to Dr. Rosalie Bertell, the U.S. Military's first target under the HAARP program is the electrojet: a river of electricity that flows thousands of miles through the sky and down into the polar icecap. The electrojet will become a vibrating artificial antenna for sending electromagnetic radiation raining down on the earth. The U.S. military can then “X-ray” the earth and talk to submarines.<sup>1491</sup>

No surprise, by the way, aerospace systems are some of the most disruptive agents leading to global climatic mayhem. Says Bertell:

**“During the 1980's, rocket launches globally numbered about 500 to 600 a year, peaking at 1500 in 1989. There were many more during the Gulf War. The Shuttle is the largest of the solid fuel rockets, with twin 45-meter boosters. All solid fuel rockets release large amounts of hydrochloric acid in their exhaust, each Shuttle flight injecting about 75 tons of ozone destroying chlorine into the stratosphere. Those launched since 1992 inject even more ozone-destroying chlorine, about 187 tons, into the stratosphere (which contains the ozone layer).<sup>[50]</sup>**

In researching *Angels Don't Play This HAARP*, the authors discovered numerous patents associated with the HAARP program for nuclear weapons, atmospheric disturbances and, of course, weather (ENMOD) weaponry. Many of these were originally controlled by ARCO Power Technologies Incorporated (APTI), a subsidiary of Atlantic Richfield Company, one of the biggest oil companies in the world. APTI was the contractor that built the HAARP facility. ARCO sold this subsidiary, the patents and the second phase construction contract to E-Systems in June 1994.<sup>[51]</sup>

**Raytheon, one of the largest defense contractors in the world, bought out E-Systems. Raytheon has thousands of patents, some of which will be valuable to HAARP. Twelve patents [comprise] the backbone of the HAARP project, and are now buried among the thousands of others held in the name of Raytheon.**

**Bernard J. Eastlund's U.S. Patent # 4,686,605, "Method and Apparatus for Altering a Region in the Earth's Atmosphere, Ionosphere, and/or Magnetosphere" was sealed for a year under a government Secrecy Order. The Eastlund ionospheric heater was different: the radio frequency (RF) radiation was concentrated and focused to a point in the ionosphere. This difference throws an unprecedented amount of energy into the ionosphere. This huge difference could lift and change the ionosphere in the ways necessary to create futuristic effects described in the patent.**

**What would this technology be worth to ARCO, the owner of the patents? They could**

**make enormous profits by beaming [wireless] electrical power from a powerhouse in the gas fields to the consumer. For a time, HAARP researchers could not prove that this was one of the intended uses for HAARP. In April, 1995, however, Begich found other patents, connected with a “key personnel” list for APTI. Some of these new APTI patents were indeed a wireless system for sending electrical power.**

Again, it is no surprise to find significant evidence that the military has directly pursued the ENMOD research and weather weapons capabilities discussed with trepidation by national science adviser Gordon J.F. McDonald (cited above) who, as early as 1968, articulated the dynamics of energy perturbations, thresholds and instabilities.<sup>1521</sup>

**The patent said: “Thus, this invention provides the ability to put unprecedented amounts of power in the Earth's atmosphere at strategic locations and to maintain the power injection level, particularly if random pulsing is employed, in a manner far more precise and better controlled than heretofore accomplished by the prior art, particularly by detonation of nuclear devices of various yields at various altitudes...”**

**“Weather modification is possible by, for example, altering upper atmosphere wind patterns by constructing one or more plumes of atmospheric particles which will act as a lens or focusing device. ... molecular modifications of the atmosphere can take place so that positive environmental effects can be achieved. Besides actually changing the molecular composition of an atmospheric region, a particular molecule or molecules can be chosen for increased presence.**

**The military has had about twenty years to work on weather warfare methods. The U.S. Department of Defense sampled lightning and hurricane manipulation studies in Project Skyfire and Project Stormfury. And they looked at some complicated technologies that would give big effects.**

**The HAARP project is the test run for a super-powerful radio wave beaming technology that lifts areas of the ionosphere by focusing a beam and heating those areas. Electromagnetic waves then bounce back onto Earth and penetrate everything-living and dead. HAARP publicity gives the impression that this is mainly an academic project with the goal of changing the ionosphere to improve communications for our own good. However, other US military documents put it more clearly: HAARP aims to learn how to exploit the ionosphere for Department of Defense purposes. Communicating with submarines is only one of those purposes.<sup>[53]</sup>**

In light of the conclusive evidence of weather warfare capabilities outlined above it is instructive to revisit the recent statements by USAF Major Barry B. Coble and USAF Director of Weather Brig. General Fred Lewis that were previously cited herein:

**We want to anticipate and exploit the weather, not modify it. (Lewis)**

**DOD funding for weather modification research peaked at \$2.8 million in 1977. Funding was eliminated in 1979. Since then there has been no active research effort into weather modification by DOD. The Air Force spends no money on research, and there is no effort to monitor civilian research, applications and advancements. The Army's program, "Owning the Weather for the Battlefield," deals only with incorporating weather information into the digitized battlefield of the future. Efforts to modify the weather for battle are not being pursued. (Coble)**

### ***The Revolving Doors of Secrecy and Denial***

It is interesting to note the extended connections between so-called "civilian" university research programs, their graduates, and the institutions of secrecy where ENMOD and weather warfare technologies are most likely – or *certainly* -- under development. Noted above were the many HAARP related interests of Raytheon Corporation. Another major defense contractor involved in the prime contracts for space-based weapons and the Strategic Defense Initiative is Lockheed Martin Corporation. One more company of note

is SAIC -- Science Applications International Corporation -- the original developer of Department of Defense information technologies that, amongst other developments, spawned the Internet.

Raytheon Corporation and General Electric Aerospace have both had major collaborative programs with the University of Massachusetts Department of Electrical and Computer Engineering (ECE). In the 1980's both corporations hired and then funded UMass ECE graduate students who went on to work for them. The GE/ UMass Microwave Master's Engineering Program was one such collaboration.

Raytheon Corporation currently employs numerous former ECE and MIRSL (Microwave Remote Sensing Laboratory) Master's and Ph.D.s degree graduate students.

A company called Prosensing Inc., (Amherst, MA), was created by a Ph.D. graduate of the MIRSL programs; other MIRSL graduates retain all key Prosensing management and research positions. Prosensing recently (circa 2001) merged with another local company called Quadrant Engineering. University of Massachusetts MIRSL Professors Calvin T. Swift and Robert E. Macintosh founded Quadrant Engineering in 1981.<sup>[54]</sup> Quadrant and Prosensing work with numerous Department of Defense contractors, including the Office of Naval Research (ONR); Air Force Research Lab at Hanscom AFB (MA); NASA and NOAA.

At least one Ph. D. candidate currently enrolled in the MIRSL programs has a NATO Secret security clearance.<sup>[55]</sup> Access to some University of Massachusetts buildings -- including the building housings the offices of professors -- requires card keys. Several graduate students now work with Massachusetts Institute of Technology Lincoln Labs -- also involved in highly classified space and defense programs. At least one MIRSL Ph. D. graduate is now employed by SAIC -- one of the most secretive institutions of the National Security apparatus.

SAIC has ongoing collaborations with Bechtel -- another of the world's most secretive aerospace technology, energy infrastructure and defense contractors, and one with ties to the intelligence community at the highest and deepest levels.<sup>[56]</sup> SAIC works closely with DARPA -- Defense Advanced Research Projects Agency -- the granting agency behind **HAARP** and many other secretive advanced research and development programs.<sup>[57]</sup> SAIC directors include: U.S. Navy Admiral B.R. Inman (ret.); U.S. Army General W.A. Downing (ret.); and U.S. Air Force General J.A. Welch (ret.).<sup>[58]</sup> SAIC also has an ongoing collaboration with the multibillion doallr pharmaceutical giant Bristol Myers Squibb (BMS). Unsurprisingly, through shared directorships, BMS is economically and politically aligned with the New York Times Corporation. Last SAIC has long been entrenched with oil, gas and nuclear interests.

No surprise either, SAIC provides major support for the core of the U.S. intelligence apparatus -- the National Reconnaissance Office -- and SAIC has invested heavily in advanced Unmanned Aerial Vehicles. To remind readers, the NRO feeds the Central Intelligence Agency and the National Security Agency (orders of magnitude more critical

than the CIA): the NRO builds and operates America's spy satellites, and they specialize in intelligence-gathering and information warfare.

The *Vigilante Vertical Takeoff and Landing* UAV was first developed and later refined under SAIC's internal R&D program. SAIC recently received a Navy contract to deliver a reengineered version of Vigilante and fly it in a tactical demonstration. Clearly delineating the expected uses of these UAVs in their Annual Report – always for the betterment of the civilized world --- SAIC notes that *Vigilante* applications “could include border surveillance, oil pipeline monitoring, and special operations missions.” (No doubt these special operations missions will further secure American military superiority at the expense of the world's innocent, poor -- and already disenfranchised – people.)

When SAIC says that they “lead a multi-contractor team that provides performance analysis of future systems architectures” we can be sure that these “future systems” include highly secretive “black” programs buried in the belly of the beast. Amongst these, no doubt, are weather warfare technologies and expertise.

**Our space experts also analyze programs and alternatives in conjunction with the National Security Space Architect, Air Force Space Command, and National Reconnaissance Office. Our engineers are developing and integrating systems to collect and process information, and to enable correlation and coordinated communication of battle conditions. For the Air Force Space and Missile Systems Center, we provide planning, systems engineering, and integration for advanced space development and warfighter exploitation... Today's environment and infrastructure challenges demand the ability to understand, integrate, and optimize natural processes and human systems. <sup>[59]</sup>**

Again, it would be naïve, irresponsible and absurd to assume that the U.S. defense-intelligence apparatus is pursuing such lethal and comprehensive weapons technologies, but ignoring ENMOD research and development that might deny U.S. forces optimal conditions of give “the enemy” some military (environmental) advantage. How does a military force “optimize natural processes?”

Through MIRSL, ECE and other alumni, the University of Massachusetts retains significant, meaningful and contemporary ties with defense and intelligence institutions, and through these ties the faculty gains critical feedback to enable them to further hone and focus their research activities in accordance with major military objectives and trends. (This is standard operating procedure.)



As university researchers learn what technologies corporations, agencies and institutions need, they develop programs aimed at providing the basic support research, and at developing the necessary intellectual and human capital. This is how such research programs – and the academics involved -- insure their proliferation and success.

Thus are university grants written with a thorough understanding of the military and intelligence needs. Funds are subsequently provided. Intellectual and human resources are developed, and then transferred to the funding institutions. The cycle is then complete.

It is clear, then, that University of Massachusetts researchers are using the cover of civilian atmospheric research and geophysical monitoring to support the U.S. Department of Defense – Department of Offense would more aptly summarize the agenda -- objectives from the most basic and fundamental levels to the highest echelons of classified research and development.

Weather warfare or ENMOD technologies are clearly under development. Some have already been deployed and tested. However, to drive the point home one last time, were we to assume that military spokespeople were sincere and honest – an assumption clearly disproved at this point -- we could merely note the plethora of studies and documents further clarifying the military's active pursuit of ENMOD capabilities. I will provide a brief list, by no means exhaustive.

Please note the dates and sponsors of these publications. Last, please consider the likelihood that significant ENMOD research and development occurs under the cover of friendly client regimes in other countries (e.g. Brazil): hence the preservation of highly classified top-secret material as indicated below.

**Peter M. Banks, "Overview of Ionospheric Modification from Space Platforms," in Ionospheric Modification and Its Potential to Enhance or Degrade the Performance of Military Systems, AGARD Conference Proceedings 485, October 1990, 19-1.**

**Christopher Centner, et al., Environmental Warfare: Implications for Policymakers and War Planners, Maxwell AFB, Ala.: Air Command and Staff College, May 1995.**

**Lewis M. Duncan and Robert L. Showen, "Review of Soviet Ionospheric Modification Research," in Ionospheric Modification and Its Potential to Enhance or Degrade the Performance of Military Systems AGARD Conference Proceedings 485, October 1990.**

Paul A. Kossey, et al. “Artificial Ionospheric Mirrors (AIM): Concept and Issues,” in Ionospheric Modification and its Potential to Enhance or Degrade the Performance of Military Systems, AGARD Conference Proceedings 485, October 1990.

Capt Edward E. Hume Jr., Atmospheric and Space Environmental Research Programs in Brazil (U), March 1993. Foreign Aerospace Science and Technology Center, AF Intelligence Command, 24 September 1992. (Secret) Information extracted is unclassified.

G. E. James, “Chaos Theory: The Essentials for Military Applications,” ACSC Theater Air Campaign Studies Coursebook, AY96, Vol. 8. Maxwell AFB, Ala.: Air University Press, 1995.

Capt Mike Johnson, Upper Atmospheric Research and Modification-Former Soviet Union (U), supporting document DST-18205-475-92, Foreign Aerospace Science and Technology Center, AF Intelligence Command, 24 September 1992. (Secret) Information extracted is unclassified.

SPACECAST 2020, Space Weather Support for Communications, White paper G. Maxwell AFB, Ala.: Air War College/2020, 1994.

Robert A. Sutherland, “Results of Man-Made Fog Experiment,” in Proceedings of the 1991 Battlefield Atmospherics Conference, Fort Bliss, Tex.: Hinman Hall, 3-6 December 1991.

Edward M. Tomlinson, Kenneth C. Young, and Duane D. Smith Laser Technology Applications for Dissipation of Warm Fog at Airfields, PL-TR-92-2087. Hanscom AFB, Mass.: Air Force Materiel Command, 1992.

### *The Falsification of Consciousness*

The extent of the subterfuge we as American citizens face from our leadership, and our media institutions, can be mildly gleamed from the above. Unfortunately, this is but the tip of the weather warfare and environmental modification iceberg. The material in this report is readily available to the general (world) public. Given that an individual outside the classified sectors of government can so easily access this information, we can take

this as a powerful testament to the vast assortment of information, research and development that must exist, and retain classification, within the defense and intelligence arena.

Much of the general public remains apathetic, disinterested, and confused by the climate skeptics and the huge propaganda machine. The debate centers on whether there is clear scientific rationale to address climate change. The disparity between public perceptions and military realities is monumental. The current public debate around climate protocols and greenhouse gas emissions only serves to facilitate greater military adventurism, at the expense of American citizens, at the expense of democracy, to the greater devastation of earth and all its life forms.

Thus do we draw the following conclusions from the limited research provided above:

1. The general public remains confused by climate skeptics.
2. The scientific community is mostly engaged in a narrow debate about climate change.
3. The spectrums of problems of climatic mayhem are greatly unappreciated.
4. Where these problems are appreciated, proponents argue narrowly about fossil fuels and climate protocols that, conveniently, distract and deflect attention from greater issues of secrecy, military dominance and environmental chaos.
5. Military and “civilian” ENMOD capabilities are already being tested, and quite likely have already been deployed to affect human loss of life and environmental instability.
6. The U.S. government position vacillates between admissions that limited development of ENMOD technologies has occurred in the private sector, and that ENMOD technologies do not exist at all.
7. Scientists, soldiers and government officials have lied outright, and many continue to intentionally obfuscate and misinform on climate issues and weather warfare.
8. There is a trillion dollar industry behind the monied interests, and the propaganda, of fossil fuels, weather warfare, military and climate issues.
9. The military-industrial complex has no intentions of mitigating climatic mayhem.
10. ENMOD and weather weaponry relies on widespread environmental instability to provide a threshold of “background” chaos to shield its covert ENMOD operations.
11. The United States of America has violated the **1977 Convention on the Prohibition of Military or Other Hostile Use of Environmental Modification Techniques**, (ENMOD Treaty), of which it is a long-standing signatory member.

12. The United Nations has demonstrated its lack of attention and investigation into climate issues and the violations of international treaties (as above).
13. The military ENMOD programs and their goals are predicated on widespread devastation, environmental calamity, and loss of life in the so-called “developing” world.
14. Gross environmental instabilities are appearing more frequently, with greater force and violence, virtually everywhere at once.
15. Intentional depopulation of various, and large, groups and ethnicities by various other groups and ethnicities is occurring, and will increasingly occur, given the current momentum and direction of American military-corporate power.
16. The United States of America has violated the *Convention on the Prevention and Punishment of Genocide*, approved by the General Assembly of the United Nations in Resolution 260 A (III) of 9 December 1948, to which it is a signatory member.
17. The United States is responsible for war crimes and genocide in numerous instances.
18. The United Nations has not served the oversight purposes for which it was ostensibly created, and instead serves the purposes for which it was actually created: to insure the prosperity and military objectives of powerful entrenched interests.
19. Rich and poor countries alike will increasingly suffer as accelerated processes of environmental change are aggravated by unforeseen feedback mechanisms.
20. The radical shift to an alternate state or states of climate, most probably undesirable and unmanageable, has become an increasingly likely event, and it is increasingly likely that such an event will occur sooner rather than later. ~ **end.**

Keith Harmon Snow graduated B.S.E.E. and M.S.E.E. with a specialty in microwaves and antennas engineering from the University of Massachusetts, Department of Electrical and Computer Engineering, in 1986. From 1985 to 1989 he worked for General Electric Aerospace Electronics Laboratory on aerospace and defense technologies for aerospace and defense communications, RADAR EW, and Strategic Defense Initiative (SDI) programs. Since 1990 he has worked as a journalist.

---

<sup>[1]</sup> Titled after a popular column by media analyst Edward S. Herman.

<sup>[2]</sup> Despite repeated requests, Amherst College Radio could not produce a copy of this PSA, and hence the sponsoring organization remains unidentified, although the Christian organization was named during the broadcasts.

<sup>[3]</sup> Progressives – especially democrats -- point to the article as proof of the media’s absence of bias and investigative belligerence in reporting on private and government monied interests.

<sup>[4]</sup> Michele Norris, "Weather As A Weapon: Manipulating the Weather," ABCNEWS.com, February 17, 2002,

< [www.abcnews.go.com/onair/DailyNews/wnt\\_weatherwar990217\\_story.html](http://www.abcnews.go.com/onair/DailyNews/wnt_weatherwar990217_story.html) >.

<sup>[5]</sup> Michele Norris, "Weather As A Weapon: Manipulating the Weather," ABCNEWS.com, February 17, 2002,

< [www.abcnews.go.com/onair/DailyNews/wnt\\_weatherwar990217\\_story.html](http://www.abcnews.go.com/onair/DailyNews/wnt_weatherwar990217_story.html) >.

<sup>[6]</sup> Vladimir Krsljanin, "Nato Used Weather Warfare in Serbia," reported in < [www.tenc.net](http://www.tenc.net) > as a reprint from Yugoslav newspaper, Politika, March 15, 2001.

<sup>[7]</sup> "U.S. Government Policy Regarding Weather Modification," Enclosure C in CJCSI 3810.01A, Chairman of the Joint Chiefs of Staff Instruction, U.S. Department of Defense Memorandum, February 25, 1998.

<sup>[8]</sup> The U.S. hearings resulted in the document Alleged Assassination Plots Involving Foreign Leaders, U.S. Senate Select Committee on Intelligence, 1975. More broadly, the literature abounds with credible sources and publications detailing covert actions and secret programs. One of the best is William Blum, Killing Hope: U.S. Military and CIA Interventions Since World War II, Common Courage Press, 1995; See also Gary Webb, Dark Alliance: The CIA, the Contras and the Crack Cocaine Explosion, Seven Stories Press, 1999; Alexander Cockburn and Jeffrey St. Clair, Whiteout: The CIA, Drugs and the Press, Verso, 1998; David N. Gibbs, "Academics and Spies: The Silence That Roars" (Opinion), L.A. Times, January 28, 2001; Chris Mooney, "For Your Eyes Only: The CIA will let you see classified documents -- but at what price?" Lingua Franca, November 2000, pp. 35-43; Leonard G. Horowitz, Emerging Viruses: Aids & Ebola: Nature, Accident or Intentional? Tetrahedron, 1996; Noam Chomsky and Edward S. Herman, The Washington Connection and Third World Fascism, South End Press, 1979; Gerard Colby and Charlotte Dennett, Thy Will Be Done: The Conquest of the Amazon, HarperCollins, 1996; Wayne Madsen, Genocide and Covert Operations in Africa, 1993-1999, Mellen Books, 1999.

<sup>[9]</sup> See e.g., Strategic Assessment 1996: The Instruments of U.S. Power, National Defense University, 1996;

<sup>[10]</sup> Unless other wise noted, quotes in this section are from: Weather as a Force Multiplier: Owning the Weather in 2025, Dept. of Defense, August 1996: pp. 1-12, < [www.au.af.mil/au/2025/volume3/chap15/v3c15-1.htm](http://www.au.af.mil/au/2025/volume3/chap15/v3c15-1.htm) >.

<sup>[11]</sup> Maj. Robert J. Rizza, Cold Fog Dispersal System (CFDS) End-of-Season Report, FY95, Fairchild AFB, February 27, 1996, p. 2, in Weather as a Force Multiplier: Owning the Weather in 2025, Department of Defense, August 1996: p. 10.

<sup>[12]</sup> From Weather as a Force Multiplier: A pilot program (Project Popeye) conducted in 1966 attempted to extend the monsoon season in order to increase the amount of mud on the Ho Chi Minh trail thereby reducing enemy movements. A silver iodide nuclei agent was dispersed from WC-130, F4 and A-1E aircraft into the clouds over portions of the trail winding from North Vietnam through Laos and Cambodia into South Vietnam. Positive results during this initial program led to continued operations from 1967 to 1972. E. M. Frisby, "Weather-modification in Southeast Asia, 1966-1972," The Journal of Weather Modification Vol. 14, No. 1 (April 1982): 1-3.

<sup>[13]</sup> See David N. Gibbs, "Academics and Spies: The Silence That Roars" (Opinion), L.A. Times, January 28, 2001.

<sup>[14]</sup> Weather as a Force Multiplier: Owning the Weather in 2025, Department of Defense, August 1996: p. 3;

<sup>[15]</sup> Gordon J.F. McDonald, "How to Wreck the Environment," Unless Peace Comes, 1968: p. 1.

<sup>[16]</sup> Gordon J.F. McDonald, "How to Wreck the Environment," Unless Peace Comes, 1968: p. 3.

<sup>[17]</sup> Gordon J.F. McDonald, "How to Wreck the Environment," Unless Peace Comes, 1968: pp. 5-7. On recent Antarctic instabilities, see the related report: Climatic Mayhem: Fossil Fuels, Public Policy and the Coming Permanent State of Emergency.

<sup>[18]</sup> "Sonar Killed Whales, Navy Admits," Environment News Service, December 2001; and Ben White, "U.S. Navy Kills Whales in the Bahamas," Animal Welfare Institute Quarterly, Summer 2000, Vol. 49, No. 3,

<sup>[19]</sup> Dr. Rosalie Bertell, Times of London, November 23, 2000, reported by Michel Chossudovsky, "It Is Not Only Greenhouse Gas Emissions: Washington's New World Order Weapons Have Ability to Trigger Climate Change," November 26, 2000 < <http://emperors-clothes.com/articles/chuss/haarp> >.

<sup>[201]</sup> Maj. Robert J. Rizza, Cold Fog Dispersal System (CFDS) End-of-Season Report, FY95, Fairchild AFB, February 27, 1996, p. 2, in Weather as a Force Multiplier: Owning the Weather in 2025, Department of Defense, August 1996: p. 10.

<sup>[211]</sup> Weather as a Force Multiplier: Owning the Weather in 2025, Department of Defense, August 1996: p. 8.

<sup>[221]</sup> Marc Filterman in Intelligence Newsletter, December 16, 1999.

<sup>[231]</sup> Irving Langmuir, Final Report: Project Cirrus, *Report No. PL 140*, General Electric Research Laboratory, December 13, 1948, p. 14.

<sup>[241]</sup> Ye Vostruxov, "Laser and Cloud: Unusual Experiment of Siberian Scientists," translated by SCITRAN, Wright-Patterson AFB, Ohio, Foreign Technology Division, September 1987, p. 5.

<sup>[251]</sup> Zhou Wei, "Meteorological Weapons," translated by SCITRAN, Wright-Patterson AFB, Ohio, Foreign Technology Division, March 1985, p. 4.

<sup>[261]</sup> Barry B. Coble, Benign Weather Modification, School of Advanced Airpower Studies, March, 1997: pp. 12-13.

<sup>[271]</sup> Barry B. Coble, Benign Weather Modification, School of Advanced Airpower Studies, March, 1997: pp. 12-13.

<sup>[281]</sup> Barry B. Coble, "Benign Weather Modification," School of Advanced Airpower Studies, March 1997: p. 19.

<sup>[291]</sup> Nick Begich & Jeane Manning, Vandalism in the Sky, Nexus Magazine, Vol. 3, No. 1, < [www.earthpulse.com/haarp/vandalism](http://www.earthpulse.com/haarp/vandalism) >.

<sup>[301]</sup> Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3810.01A, February 25, 1998.

<sup>[311]</sup> On the collaboration between Nazi and U.S. military, finance and energy corporations, see Charles Higham, Trading With the Enemy: The Nazi American Money Plot 1933-1949, Barnes & Noble, 1983.

<sup>[321]</sup> On the Helio Courier, see Gerard Colby and Charlotte Dennett, Thy Will Be Done: The Conquest of the Amazon, HarperCollins, 1996, p. 269, 282.

<sup>[331]</sup> See the multiple weather related payloads of UAVs in: The Military Balance 1996/1997, The International Institute for Strategic Studies, October 1996, pp. 291-292; see U.S. Department of Defense, Atmospheric Radiation Measurement-Unmanned Aerospace Vehicle (ARM-UAV) Program; see also University of Massachusetts, Microwave Remote Sensing Laboratory (MIRSL) work in support of the ARM-UAV program < [www.esc.umass.edu/ece/labs/mirsl/CAMRAD/intro](http://www.esc.umass.edu/ece/labs/mirsl/CAMRAD/intro) >.

<sup>[341]</sup> Jim Garamore, "Fly High After Afghanistan," American Forces Press Service, April 2002.

<sup>[351]</sup> Air Force 2025, < [www.au.af.mil/au/2025](http://www.au.af.mil/au/2025) > .

<sup>[361]</sup> See David N. Gibbs, "Academics and Spies: The Silence That Roars" (Opinion), L.A. Times, January 28, 2001.

<sup>[371]</sup> University of Massachusetts, MIRSL, < [www.esc.umass.edu/ece/labs/mirsl/CAMRAD/intro](http://www.esc.umass.edu/ece/labs/mirsl/CAMRAD/intro) >.

<sup>[381]</sup> Danaher Corporation, Annual Report 1999, < [www.danaher.com/htm/investor/annual99/mngdir.html](http://www.danaher.com/htm/investor/annual99/mngdir.html) >.

<sup>[391]</sup> See U.S. Department of Defense, Atmospheric Radiation Measurement-Unmanned Aerospace Vehicle (ARM-UAV) Program; see also University of Massachusetts, Microwave Remote Sensing Laboratory (MIRSL) work in support of the ARM-UAV program < [www.esc.umass.edu/ece/labs/mirsl/CAMRAD/intro](http://www.esc.umass.edu/ece/labs/mirsl/CAMRAD/intro) >.

<sup>[401]</sup> Peter Pilewskie, et al, ERAST – Measurement of Solar Spectral Irradiance on Unmanned Aerial Vehicles, Spring 1999, < [www.geo.arc.nasa.gov/sgp/radiation/rad1.html](http://www.geo.arc.nasa.gov/sgp/radiation/rad1.html) >.

<sup>[411]</sup> The UAV information in this section all comes from the document Air Force 2025, < [www.au.af.mil/au/2025](http://www.au.af.mil/au/2025) >.

<sup>[421]</sup> The UAV information in this section all comes from the document Air Force 2025, < [www.au.af.mil/au/2025](http://www.au.af.mil/au/2025) >.

<sup>[431]</sup> See, e.g., William Blum, Killing Hope: U.S. Military and CIA Interventions Since World War II, Common Courage Press, 1995; Noam Chomsky and Edward S. Herman, The Political Economy of Human Rights (Volumes I & II), South End Press, 1979.

<sup>[441]</sup> Air Force 2025, < [www.au.af.mil/au/2025](http://www.au.af.mil/au/2025) >.

<sup>[451]</sup> See The Microwave Remote Sensing Laboratory, < [www.esc.umass.edu/ece/labs/mirsl/collaboration.html](http://www.esc.umass.edu/ece/labs/mirsl/collaboration.html) >.

<sup>[461]</sup> Much or most of the research in this section is based on the reports and writings of Dr. Nick Begich and Jeane Manning. Begich and their extensive work on the HAARP project documented in detail in Angels Don't Play This HAARP: Advances in Tesla Technology, Earthpulse Press, 1996.

<sup>[47]</sup> See, e.g., < <http://www.earthpulse.com/haarp/background.html> > and Dr. Nick Begich and Jeane Manning, Angels Don't Play This HAARP: Advances in Tesla Technology, Earthpulse Press, 1996.

<sup>[48]</sup> Nick Begich and Jeane Manning, "Vandalism in the Sky," Nexus Magazine, Vol. 3No. 1, < [www.earthpulse.com/haarp/vandalism.html](http://www.earthpulse.com/haarp/vandalism.html) >.

<sup>[49]</sup> Dr. Rosalie Bertell, Times of London, Nov. 23, 2000; Rosalie Bertell, Background of the HAARP Program, November 5, 1996, < <http://www.globalpolicy.org/socecon/envronmt/weapons.htm> >.

<sup>[50]</sup> Dr. Rosalie Bertell, Times of London, Nov. 23, 2000; Bertell: < [www.earthpulse.com/haarp/background.html](http://www.earthpulse.com/haarp/background.html) >.

<sup>[51]</sup> Nick Begich and Jeane Manning, "Vandalism in the Sky," Nexus Magazine, Vol. 3No. 1, < [www.earthpulse.com/haarp/vandalism.html](http://www.earthpulse.com/haarp/vandalism.html) >.

<sup>[52]</sup> Gordon J. F. McDonald, "How to Wreck the Environment," Unless Peace Comes, 1968.

<sup>[53]</sup> See further extensive discussion in: Nick Begich and Jeane Manning, "Vandalism in the Sky," Nexus Magazine, Vol. 3, No. 1, < [www.earthpulse.com/haarp/vandalism.html](http://www.earthpulse.com/haarp/vandalism.html) >.

<sup>[54]</sup> See MIRSL related documentation on the Internet.

<sup>[55]</sup> See the resume for Bahar Ince at <http://www-unix.ecs.umass.edu/~tince> .

<sup>[56]</sup> See Laton McCartney, Friends in High Places: The Bechtel Story: The Most Secret Corporation and How It Engineered The World, Simon and Schuster, 1988.

<sup>[57]</sup> SAIC information is taken from their Annual Reports 2000, 2001; Proxy Statements; and web site.

<sup>[58]</sup> See SAIC Proxy Statement 2001.

<sup>[59]</sup> Annual Report 2001, SAIC.