

Introduction

This briefing presents the basic concepts of Soviet scalar electromagnetic weapons, some of the major types available, and evidence of their widespread testing.

- Scalar Electromagnetics is Electrogravitation -

Scalar electromagnetics is an extension of present electromagnetics (EM) to include gravitation. That is, it is a unified, and, what is more important, it is a unified engineering theory. Its basis was initially discovered by Nikola Tesla.

In the scalar EM extension, EM field energy can be turned into gravitational field energy and vice versa. This exchange can be patterned and localized, in specific areas or objects. Such a controlled change of electromagnetics to gravitation is not possible in the normal EM or physics presently taught in Western textbooks. However, the bits and pieces of the theory have been scattered through the physics literature for some time, but no orthodox Western scientist seems to have realized that these anomalous portions could be integrated into a startling new physics. Unorthodox experimenters, inventors, and scientists have made discoveries in this arena for several decades, but again have not realized the exact implications or the precise manner in which their results could be combined with present electrical physics.

- Fer-de-Lance -

Such sluggishness is certainly not present in the Soviet Union. For over three decades, the Soviet Union has been developing electrogravitation and applying it to develop strange new secret weapons of incredible power and capability. They have sustained the largest weapons development program ever launched by any nation, and they have kept it effectively hidden from prying Western eyes. I have called this program "Fer-de-Lance," after the deadly South American pit viper of that name.

The dreaded fer-de-lance is a snake of great agility and lethal effect. It often ambushes its hapless prey, and strikes unexpectedly and without warning. Its first sudden strike is usually lethal to its victim, which promptly expires in writhing agony. Since the Soviet development of scalar EM weapons has been designed for the same purpose, the name seems appropriate.

The equivalent effort of about seven Manhattan projects has been poured into Fer-de-Lance by the Soviets, and the program has been successful almost beyond imagination. The eery weapons are now developed, deployed, and tested. The ambush has been completed; Fer-de-Lance is coiled and ready to strike.

- Energetics and Directed-Energy Weapons (DEWs) -

The ordinary Soviet name for this type of weapons science is energetics. In the West, that term is believed to be associated with conventional directed-energy weapons (DEWs) such as particle beam weapons, lasers, radio frequency (RF) directed-energy devices, etc. The Soviets do not limit the term in this way.

Western scientists are familiar only with directed-energy weapons where fragments, masses, photons, or particles travel through space and contact the target to deliver their effects. Hence in their thinking they limit the Soviet term "energetics" to the type of weapons they themselves understand -- exotic but normal weapons using energy or mass traveling through space to impact a target.

However, it is possible to focus the potential for the effects of a weapon through spacetime itself, in a manner so that mass and energy do not "travel through space" from the transmitter to the target at all. Instead, ripples and patterns in the fabric of spacetime itself are manipulated to meet and interfere in and at the local spacetime of some distant target. There interference of these ripple patterns creates the desired energetic effect (hence the term energetics) directly in and through the target itself, emerging from the very spacetime (vacuum) in which the target is imbedded at its distant location. As used by the Soviets, energetics refers to these eerie new superweapons, as well as to the more mundane DEWs known to the West.

As a consequence of the Soviet breakthrough and decades of feverish development, monstrous strategic weapons undreamed of in the West are already in Soviet hands. A noose is slowly and steadily being tightened about our throats, and it is already the 11th hour.

- The Soviets Use a Deception Plan -

Concomitant with this supersecret development program, the Soviets developed and implemented an elaborate deception plan to conceal these startling weapons and their nature from Western eyes until it is too late. Soviet deception has been so successful that even when Western scientists are confronted with the actual Soviet tests of these weapons directly over their heads, they do not recognize the weaponry nor the nature of the effects produced.

As early as January 1960, Nikita Khrushchev announced the Soviet development of a new, fantastic weapon. On May 1, 1960 Soviet defensive radars -- rigged as prototype weapons of this new kind -- probably downed Francis Gary Powers's high-flying U-2 reconnaissance plane over the Soviet Union, precipitating a major diplomatic incident.

On April 10, 1963 one of the first new superweapons operationally deployed was used to destroy the U.S.S. Thresher atomic submarine underwater, off the east coast of the U.S. The next day, April 11, 1963 the same deployed superweapon was utilized in a different mode to produce a giant underwater explosion in the ocean over the Puerto Rican Trench, 100 miles north of Puerto Rico.

Over the years, various aircraft were interfered with or downed as tests of these Soviet weapons. A particular case involved the mysterious loss of F-111s in the Vietnam conflict. At least one downed F-111 crew was recovered in the subsequent prisoner-of-war exchange. On that aircraft, all electrical systems suddenly were in difficulty simultaneously. All emergency indicator lamps were lit up, like a Christmas tree." This was probably due to special Soviet teams converting some North Vietnamese SA-2 missile system radars to the scalar EM mode, and employing "scalar beam" interference to produce spurious EM noise throughout the electrical and electronic systems of the aircraft.

In late April/early May of 1985, the entire armada of Soviet strategic scalar EM superweapons was activated as a special celebration of the 40th anniversary of the end of WWII. Activation of this armada (which probably contained over 100 giant weapons), together with 27 giant power systems and a large number of command and control transmissions, was monitored on an advanced, proprietary detection system by Frank Golden. After the giant strategic exercise, which lasted several days, most of the weapons and power sources were once again stood down to "standby."

The NASA shuttle launches provided a convenient opportunity for Soviet testing of these superweapons in a Launch Phase ABM mode, where a launched missile can be detected and destroyed shortly after liftoff. At first, electromagnetic pulse (EMP) bursts on the early shuttle trajectory were deliberately delayed in time, to prevent actual destruction of the target and avoid alerting the U.S. that something unusual was happening.

The shuttle launch of November 26, 1985 saw a particularly significant-test of this kind. In this case, a very loud "sonic boom" or explosion occurred over the launch site 12 minutes after shuttle liftoff, when the shuttle was already away and downrange. At least two previous shuttle launches had also been used as pseudotargets, with delayed booms occurring over the launch site well behind the vehicles.

After the lack of U.S. reaction to these three tests showed that the U.S. still had no knowledge of the new technology and did not even recognize its employment, the Soviets apparently decided to proceed with tests where the target vehicles would actually be destroyed.

On December 12, 1985 the same Soviet weapon tested against the NASA shuttle launches may have deliberately interfered with the controls of an Arrow DC-8 taking off from Gander Air Force Base, Newfoundland. At an altitude of 100 feet, the aircraft -- carrying over 250 U.S. soldiers and civilian crew members -- lost power and sank into the ground tail-low, killing everyone on board. Three Canadian witnesses to the crash were interviewed over the Canadian Broadcast Corporation's television news on April 8, 1986 at 10 p.m. No flame or smoke issued from the plane before its descent and crash. However, the aircraft was seen to be mysteriously glowing with a yellow glow. That is a signature of the use of a scalar howitzer in the "continuous EM emergence" mode, similar to the manner in which the F-111s were downed in Vietnam. In short, the DC-8's electrical systems were interfered with by electromagnetic noise created throughout each increment of spacetime occupied by the aircraft. The powerful charge created in and on the aircraft also apparently caused the loss of two engines, one after the other. With its controls ineffective and power drastically reduced, the aircraft sank to earth, still in its "tail down" configuration from takeoff, and crashed and burned. The "yellow glow" was a corona due to the acquisition of a high electrical charge by the skin of the aircraft.

Other factors contributing to the crash may have been reduced lift due to poor engine maintenance, increased weight of the aircraft due to icing, and heavy loading. Still, no one has recognized the significance of the "yellow glow" or what it implies, or the possible connection between loss of the aircraft and previous Soviet testing of a Launch Phase ABM system against U.S. shuttle launches.

As this book goes to press, the last two U.S. Air Force Titan 34-D missiles fired from Vandenberg Air Force Base in California have blown up shortly after launch. The first one blew up on Aug. 28, 1985 just after lift-off. That loss has been attributed to failure of a high-powered fuel pump, causing a massive oxidizer leak and a smaller fuel leak. The second Titan loss occurred on April 18, 1986 when the missile blew up 5 seconds after lift-off. Its loss is still under investigation and no determination of cause has been made. Apparently the shuttle and the Titan presently provide the only viable launch vehicles for launching U.S. "spy" satellites. The loss of these sensitive satellites -- if indeed they constituted the payloads -- cannot help but be damaging to our strategic surveillance capability. According to the Los Angeles Times, the single remaining KH-11 satellite was launched in December 1984 and, with an expected life of two to three years, it could stop functioning later this year.

Whether or not significant Woodpecker grid activity existed in the vicinity of the Titan launch of August 1985 is unknown at this time. However, significant activity in the grid definitely occurred before the April 18 Titan disaster and on the same day.

On Easter Sunday, Mar. 30, 1986 engineer Ron Cole observed significant cloud signatures of grid pattern activity, correlated with

Soviet Woodpecker measurements. On April 18, the present author observed traces of a cloud radial over Huntsville, Alabama and took photographs of it. Preliminary reports from Thousand Oaks, California indicate extensive grid activity again on April 18, the day the second Titan exploded.

At least the second of these two missile destructions shortly after launch is suspicious, since the grid positively was active during that time. Also, a clear trail of Launch Phase A8M system indicators exists back to the massive scalar exercise of April/May 1985. The first Titan explosion in Aug. 1985 thus falls within the Soviets' "now let s test them against U.S. launch vehicles" period. The second Titan loss follows highly suspicious losses of the Arrow DC-8 on Dec -T7 1985 and the Challenger on Jan. 28, 1986. The same Soviet weapon system that destroyed those targets may also have destroyed one or both of the critical Titans.

The Soviets have also been able to significantly engineer the weather over North America for more than a decade without being found out. They have tested a fantastic range of anti-ballistic missile (ABM) defense weapons for over two decades, and no one is the wiser in the West.

As previously stated, prior to the end of November, 1985, at least three "wet-run" tests of a Soviet "launch phase ABM system" against actual U.S. shuttle launches were made directly over Cape Canaveral itself, and still no one recognized what was happening or what sort of weapon was being tested. On December 12, destruction of the Arrow DC-8 in Newfoundland produced no indications that the Americans and Canadians knew anything about the nature of the weapon possibly used.

Accordingly, after a sufficient wait to test our reactions (if any), the Soviets prepared to actually destroy a shuttle after its launch.

- Destruction of the Challenger in January 1986 -

As the whole world knows, on January 28, 1986 the shuttle Challenger was launched from Cape Canaveral, Florida after exposure to undesirable weather conditions, and disastrously exploded shortly after launch. The evidence seems to indicate that, as the rising vehicle was stressed, one end of its right booster broke loose, twisting away and into the main fuel tank, causing rupture, spillage of the fuel and catastrophic explosion. Several other anomalies still exist, however, and it is clear that a problem existed with at least one of the booster seals. All seven astronauts aboard the flight were killed in the fiery destruction of the vehicle.

Of course no one had recognized that the Soviets had already tested a launch-phase anti-ballistic missile (LPABM) system against three of our previous shuttle launches. These "wet-runs" used a deliberate "time offset" to delay the explosive emergence of electromagnetic energy in a launched shuttle's location along its trajectory. The delayed test shots resulted in very large "booms" above the launch site after the shuttle was safely out of the area, but did not destroy the shuttle vehicles themselves. For example, the delayed-shot boom occurred 12 minutes after the evening launch of Nov. 26, 1985. Even a marker beacon (large light in the sky) was utilized on that launch shortly after lift-off. The marker beacon was photographed. In addition, another photograph taken in a time sequence shows another sudden streak of light coming down and ending in a burst of light. This was probably a spatially-offset test of the "pulse" mode for destroying the shuttle. The "light burst" would have been detected in the Soviet Union and scored against its intended offset position. However, another mechanism may have been used to cause destruction of the shuttle itself.

On Jan. 1, 1986 the presence of a metal-softening signal added on to the Soviet LPABM system's scalar EM transmissions was detected by a surprised Frank Golden. The metal-softening ability of the detected signal was experimentally verified by him. Golden also locally nullified the action of the scalar EM signal in a test, rather conclusively establishing (1) that it existed and (2) what it was. The signal was apparently being prepared for use against an upcoming U.S. shuttle launch.

Just prior to the launch of the shuttle in late January, 1986, the Soviets accomplished significant weather engineering over the U.S. The jet stream was severely bent southward in the middle of the U.S., bending rightward again to move across the Florida panhandle. Icy cold air from Canada was drawn far down, into Florida and onto the Challenger sitting on its launch pad. This exposure to cold outside its tested range was probably an additional factor contributing to the Challenger's failure. Positive signatures of the Soviet weather engineering and jet stream manipulation were observed and photographed by several persons, particularly in Alabama and California.

On January 28, 1986, the Soviet scalar EM weapon system effects were sharply localized in the launch zone. Localization involved higher frequencies being present; these are quite painful to small brains -- whose hemispheres act as a scalar interferometer and detector -- such as in birds. As commented upon by national news commentators, strangely the birds were not flying that morning. Indeed, they were staying down on the ground or avoiding the area, since the sky over the area was painful to them.

As the Challenger rose, the metal-softening signal would have been experienced in and around the boosters shortly after ignition, since the booster flame acts as a special "ion-plasma" turner/detector for the scalar signal. (Certain plasmas have a unique characteristic: they transform an input transverse wave to a longitudinal wave, or an input longitudinal wave to a transverse

wave.) The effect of such a local signal is to "change mass in the immediate vicinity" with the particular scalar resonance signal. (Mass acts as a capacitance or accumulator for scalar resonance).

The ill-fated Challenger was doomed. After ignition, the booster flame acted as a ionic plasma detector/amplifier for the scalar metal-softening signal on the Soviet Woodpecker grid. The metal in and around the booster flame was slowly and steadily weakening due to charge-up with the metal-softening pattern. This contributed to booster leakage from the already cold-damaged seal. The leaking booster poured out smoke and later flame, contributing to the impending disaster.

Substantial winds and air turbulence over the site increased the stress on the Challenger as it rose through this region. This also contributed to the impending disaster and may have been deliberately created there by Soviet weather engineering.

As the Challenger stressed, eventually one or more weakened metal mounts gave way, partially freeing the end of the right booster. The booster oscillated, rotating into the tank and rupturing it. Contact of the escaping liquid fuel and the flame resulted in a fiery explosion, destroying the vehicle.

Even so another anomalous flame or light was observed on the vehicle, and may have represented a very small additional "pulse mode energy form" produced by the Soviet weapon that was attacking the Challenger. The shock of the explosion probably killed the astronauts instantly, although the cabin appears to have remained essentially intact while it plunged several miles to the ocean below.

By creating excess cold exposure to the shuttle, inducing metal-softening in and around the ignited booster, and possible adding a deliberate "intensely hot spot", the Soviets caused the Challenger to weaken and destroy itself shortly after launch, in so subtle a fashion that NASA scientists would not suspect what had actually caused the mishap. The Soviets also had previously withdrawn all their trawlers and ships which normally shadow a shuttle launch, to prevent any suggestion of Soviet presence near or involvement in the catastrophic accident.

A few days later, sporadically intense "high frequency localization signals" were still present on the grid, at least at one hinge-point at Birmingham, Alabama. From 1-4 February 1986, many birds inadvertently flew into the zone when an intense breakout of these components occurred, and dead birds fell from the sky in substantial numbers.

* According to an Urgentgram sent out by General D. Graham, on the evening of the Challenger's loss, KGB headquarters held a party to celebrate 'success of their active measure against the shuttle.' Note that all Soviet scalar EM weapons -- development, testing, deployment, and usage -- is under command and control of the KGB.

Among other things, this briefing details the bizarre series of indicators that showed the Soviet intention to destroy the vehicle, and documents the accidental discovery of the signal with which they intended to cause the shuttle to fail and destroy itself.

- Technological Surprise and a New Hiroshima -

Sadly, the bureaucratic smugness of orthodox Western scientists has materially assisted the Soviet deception process. Most Western managerial scientists -- particularly in weapons development activities -- have continued to view the Soviets as ignorant peasants, still trying to clean the mud off their boots. This view, of course, is totally untrue and unwarranted.

It takes only a few examples to refute this attitude. In nonlinear mathematics, engineering and science, the Soviets have led their Western counterparts since the beginning. The electromagnetic pulse (EMP) effect of a nuclear explosion appeared in the ordinary Soviet scientific literature before Western scientists were even aware that the effect existed. The Soviets continue to lead the world in explosive welding, titanium forming and welding, etc. While the Soviet scientists exhibit little inclination to build good washing machines, they certainly do produce state-of-the-art technology -- and beyond -- in any area in which they focus their main efforts. (We do lead the Soviets in some areas such as computers, computer software, miniaturization, etc.)

Once before, a modern nation -- the United States -- developed a mighty weapon in secrecy and used it to force a powerful foe -- Japan -- to its knees. The mindbending atomic blows to Hiroshima, and shortly after to Nagasaki, showed once and for all that in the modern age technological surprise can prove instantly disastrous. Yet in our scientific arrogance, we have assumed that no one else will ever do such a thing. We have assumed that it certainly could never happen to us, and that the "secret weapon" scenario will never be repeated. On the contrary, it has happened again, someone else has done it, and it has happened to us.

It has also become fashionable in the West to believe that all the laws of physics are already discovered. We assume we already know all of them. While we have been pridefully crowing this tune, the Soviets have been steadily discovering new laws in secret, as well as new ways to circumvent the old laws.

- We Have Given Up Defense in the Larger Sense -

Meanwhile, to defend ourselves strategically, we have chosen to forego "defense" and rely almost totally on building a powerful strategic offense that is capable (we think!) of destroying our would-be enemies anywhere in the world. Our offensive striking power is based mostly on a triad of deterrent forces -- land-based ballistic missiles, submarine-launched ballistic missiles, and strategic bombers. The cruise missile is presently being added to the triad. If this 4-part offense were nullified or destroyed by

Soviet secret weapons, we would be powerless to prevent our own destruction and Soviet domination of the world.

We have been viewing ourselves as Samson, confident in the strength of our locks.

Yet literally our locks have been secretly shorn and the Philistines are already upon us. Indeed, Soviet energetics weapons are now capable of destroying both our triad shield, our homeland, our armed forces in the field, and our population, quickly and efficiently. We have a new "gap" of monumental proportions: not a missile gap, not a submarine or bomber gap, and not even a particle beam or laser gap. We have a scalar electromagnetics or electrogravitation gap.

In this briefing, it is my purpose to show a portion of the Soviet weapons developments that have lead me to such dire conclusions. The Fer-de-Lance briefing is also an attempt to galvanize our leaders and scientists into action, for our present total vulnerability to the Soviet Fer-de-Lance weapons is intolerable and unacceptable.

Unless we achieve defenses -- and quickly -- our own demise in a fashion similar to the Hiroshima-Nagasaki scenario is inevitable and imminent.

CHARACTERIZATION

SLIDE 1

- **SINGLE ANALYST**
- **PERSONAL INTERPRETATION**
- **UNOFFICIAL**
- **NO APPROVAL/DISAPPROVAL BY ANY**
- **CORPORATION**
- **GOVT AGENCY**
- **PREPARED**
- **ON OFF-DUTY TIME**
- **AT PERSONAL EXPENSE**

We point out at the beginning that this briefing and its interpretation are the result of 22 years of analysis and effort by a single analyst.

It is entirely unofficial. It is not approved or disapproved by any corporation, company, or government agency.

It has been prepared by this analyst at nights, on weekends, on holidays, and during off-duty time.

It has been prepared mostly at personal expense, though several grants and support have been received from R. J. Reynolds III, Peter Kelly, Mike Bearden, Interdimensional Sciences, Association of Distinguished American Scientists, and others. Very valuable assistance has been received from the U.S. Psychotronics Association and the Planetary Association for Clean Energy. These contributions are deeply appreciated and most gratefully acknowledged.

Graphics and artwork support by Hal Crawford, Margaret Wilson, Tommy Neumann, Ron Cole, and Lee Giles has been invaluable. My sincere thanks go to these artists who have made the presentation vivid and imaginative. A great deal of background support was given by Joe Gambill, Frank Golden, Tom Herold, Ken Moore, Pete Kelly, Eike Mueller and Mel Bartlett and is deeply appreciated.

Finally, the help of many other persons and colleagues too numerous to enumerate is also gratefully acknowledged.

If the U.S. bureaucracy ever moves and develops defenses against scalar EM weapons, it will largely be due to the support of the persons and organizations who have freely given of their talents and resources to further this effort.

OUTLINE

SLIDE 2

- **THREE VIEWS OF ELECTROMAGNETICS**
- **EXTENDED AHARONOV-BOHM EFFECT**
- **SCALAR ELECTROMAGNETICS**
- **ELECTROGRAVITATION**
- **SCALAR INTERFERENCE**
- **KILL/DAMAGE MECHANISMS**
- **VULNERABILITY**
 - **ELECTRONICS**
 - **PERSONNEL**
 - **EQUIPMENT**
 - **MATERIEL**
- **SUMMARY**

This presentation does not attempt to cover the complete field of energetics weapons developed by the Soviet Union. Instead, it concentrates on the major areas necessary to understand the type of weapons likely to be unleashed on our strategic and tactical installations and our troops and their equipment. It does not attempt to present the frightful bio-electromagnetic weapons the Soviets have developed to be unleashed on our populace at large and on our troops in the field. Also, the briefing does not dwell on the historical progression, but on the types of weapons themselves.

Of necessity, it presents several shortcomings in classical EM, and presents three differing views of electromagnetics and what can be done with them. The briefing particularly stresses the Aharonov-Bohm (AB) effect. This mesoscopic effect, which produces action at a distance by pure EM flux and not EM force fields, has been extended by the Soviet weapons developers into the macroscopic world around us.

In addition, we develop the basic concepts of scalar electromagnetics and how electrogravitation is achieved.

The basic concepts of scalar interferometry and scalar resonance are briefly advanced, and a few of the major kill and damage mechanisms are presented.

The nearly total vulnerability of our present electronic equipment, personnel, communications, vehicles, aircraft, ships, missiles, submarines, nuclear weapons, and materiel is stressed.

Finally, a short summary is given to highlight the main points of the briefing.

ELEMENTS OF THE EMERGING THEORY

SLIDE 3

- **FLAWS IN VECTOR THEORY**

- ZERO-VECTOR SYSTEM
- KALUZA-KLEIN ASPECTS
- VACUUM/MASS EFFECTS
- SCALAR RESONANCE
- ELECTROGRAVITATION
- LOCAL GENERAL RELATIVITY
- IMPLICATIONS

Specifically, we will point out some flaws in vector mathematics itself, particularly with the concept of the zero force vector. The zero force vector is a system of forces that sum to a zero resultant. Hence the components of the summation represent a patterned stress in the medium to which they are applied, or in which they are imbedded. This includes the vacuum (spacetime) medium. In classical electromagnetics, this vacuum stress due to a zero-vector summation of EM force fields has been totally omitted and ignored.

As such, the EM "zero" force-vector summation produces a "trapped internal EM flux and flux pattern, without resultant (external) force field" condition – precisely as does the Aharonov-Bohm effect. The components of the artificially zeroed system, however, can be transmitted and still maintain their special relationship and coherence. While the AB effect has been shown to hold for the mesoscale (a few thousands of angstroms), the zero-vector scalar EM effect can hold for hundreds of thousands of kilometers.

To provide a unified electrogravitation, we adapt Kaluza-Klein 5-dimensional gravitational concepts to the idea of the zero-vector stress system in vacuum-spacetime. We also point out how simultaneously varying the magnitudes of the force components of a stress, all in phase, produces a stress wave or scalar EM wave. Scalar waves are almost always absorbed and emitted by the nucleus of the atom, not by the electrons in orbit.

The relationship of mass and vacuum, and the constitution of the vacuum, are pointed out from the viewpoint of modern quantum mechanics.

How a scalar wave resonance differs from conventional EM resonance is developed briefly. Mass and inertia are the direct result of – and are – trapped scalar resonance. The trapping mechanism is the spin of the particle.

Severely limiting assumptions in ordinary general relativity (OGR) are pointed out. In OGR, it is assumed that the local frame is always a Lorentz frame, and never curved. In other words, local spacetime is always assumed to be flat. This saves the conservation laws, simplifies relativity, and reduces "general" relativity to special relativity with distant perturbations and curvatures.

By removing this ad hoc assumption, a much richer local general relativity results. This local general relativity is readily engineered. Note that, in OGR, the physicist has actually assumed that he can never "engineer" local general relativity! Indeed, with the scalar EM approach, he can easily do so, in contradiction to what is taught in all Western universities.

By engineering a local general relativity (LGR), the individual conservation laws can be violated locally. This includes the conservation of energy/momentum, and the conservation of charge, for example.

The major implication of this startling new engineering physics is that one can engineer physical reality itself. For example, elements can be transmuted with minuscule energy input, free energy devices are possible, action at a distance is possible, communication faster than light speed is possible, etc.

By using the zero-vector approach, the virtual state can be organized and made largely deterministic, rather than statistical. This means that the probabilities of the states propagated forward by the Schroedinger equation can be engineered and changed. Whether or not a certain quantum change shall emerge or not can be determined or substantially influenced in advance. Bohm's hidden variable theory now becomes directly engineerable. This is a drastic change to quantum mechanics and physics in general.

Another implication is that this is the final engineering, for it allows the direct engineering of physical reality itself. Humans must now find a way to resolve their differences peacefully, or shortly Man will destroy himself and his biosphere by his own hand.

THREE KINDS OF ELECTROMAGNETICS

SLIDE 4

- **CLASSICAL**

**POTENTIALS JUST MATHEMATICAL CONVENIENCES
ACTIONS CAUSED BY NONZERO FORCE FIELDS
NO ACTION WHEN FORCE FIELDS ZERO**

- **QUANTUM MECHANICS**

**POTENTIALS REAL
STATISTICAL SUBSTRUCTURE
FORCE FIELDS BY DIFFERENTIATIONS
ACTION WHEN FORCE FIELDS ZERO**

- **ARTIFICIAL POTENTIALS (ELECTRO-GRAVITATION)**

**POTENTIALS REAL
FORCE FIELDS EXTERNALLY ZEROED, INTERNALLY ACTIVE
ZEROS INDIVIDUALLY DIFFER
SCALAR INTERFEROMETRY
SCALAR RESONANCE**

There are actually three kinds -- or three views -- of EM. These are (1) the classical view, (2) the quantum mechanical view, and (3) the scalar EM or electrogravitational view.

In the classical view, the potentials are just mathematical conveniences and do not physically exist. The real causative agents are the force fields, and there is no longer any electromagnetics going on if the force fields reduce to zero. Further, the ideas of "charge" and "charged mass" have been made erroneously synonymous.

Of course the classical view was formed from the idea of a thin material ether, with electricity as a thin fluid, long before the discovery of the electron. Since most earlier scientists studied

string waves and these are transverse, the EM wave was modeled as a transverse wave. Also, detection equipment actually detected transverse waves. The role of electron spin and drift velocity, which would have shown that force-field-causing EM waves in the vacuum could only be longitudinal, was not yet discovered. Maxwell's equations and the classical approach became so engrained that the basic derivations were never corrected for more modern discoveries.

The quantum mechanical view, on the other hand, regards the potentials as the real physical actants, and the force fields are just effects derived from the potentials by differentiating operators. Classically-oriented physicists have adamantly opposed this foundations requirement of QM because it would require nearly a complete redo of EM theory. It would also rather drastically change our ideas of physical reality. For years a controversy has raged around the Aharonov-Bohm effect (which demonstrates the reality of the potentials, among other things). Only this year -- 1986 -- have most physicists finally accepted the AB effect with its implications (see Physics Today, Jan. 86). However, no changes have yet been made to EM theory and the basic classical approach to electrical physics and engineering.

Yet even the QM view is flawed, since it has not examined the structure of EM forces which sum to a vector zero. Such a system produces stress, and if the summation is in the vacuum itself, it produces stress of vacuum/spacetime. Rigorously, this is a gravitational effect, and the energies of the various EM components in the local region are locked into an artificial potential. From general relativity, this type of potential where the energy density of vacuum is altered is a gravitational potential. From Kaluza-Klein unified theory, it is at least a 5-dimensional gravitational potential.

If the individual force vector components of the vector zero are varying in magnitude -- say, all in phase -- then they produce a gravitational wave. The energy density of the local vacuum is being rhythmically varied. Call such an EM, wave a scalar EM wave, where, by "scalar" we imply that, to an external observer, the EM force vector resultants are identically zero, but the local gravitational potential of the wave is varying. Thus this is an electrogravitational wave, and vector zeroing of EM force fields

constitutes a means of changing EM field energy into G-field energy. On the other hand, by breaking up the coherence of the zero-vector summation of the EM forces, nonzero EM resultants are recovered, constituting the change of gravitational energy into EM energy.

A simple means to break zero-summed coherence is by interference of two or more such zero-vector waves.

In this third view of EM, action at a distance is easily possible, and is the norm rather than the exception. In addition, a new kind of resonance – scalar resonance – exists. The scalar EM wave does not interact with orbital electrons, but rather with the interior of the nuclei of atoms. Thus the new scalar EM resonance is between nuclei and within nuclei.

BOHM-AHARONOV EFFECT

SLIDE 5

- IN FIELD-FREE REGIONS
 - E-FIELD IS ZERO
 - B-FIELD IS ZERO
- POTENTIALS STILL EXIST
 - CAUSE REAL EFFECTS
 - INTERFERENCE IS THE KEY
 - CONTAIN SUM-ZEROED SUBSTRUCTURE
- DOES NOT FOLLOW FROM
 - MECHANICS
 - CLASSICAL ELECTROMAGNETICS
- REQUIRED BY QUANTUM ELECTRODYNAMICS

In 1959, Aharonov and Bohm published a fundamental paper in Physical Review which pointed out the QM implications of potentials as the real entities, while force fields were derived effects. They showed that, even in the presence of zero EM force fields, the potentials may still exist and produce real effects in physical systems. They also suggested experiments to prove these predictions.

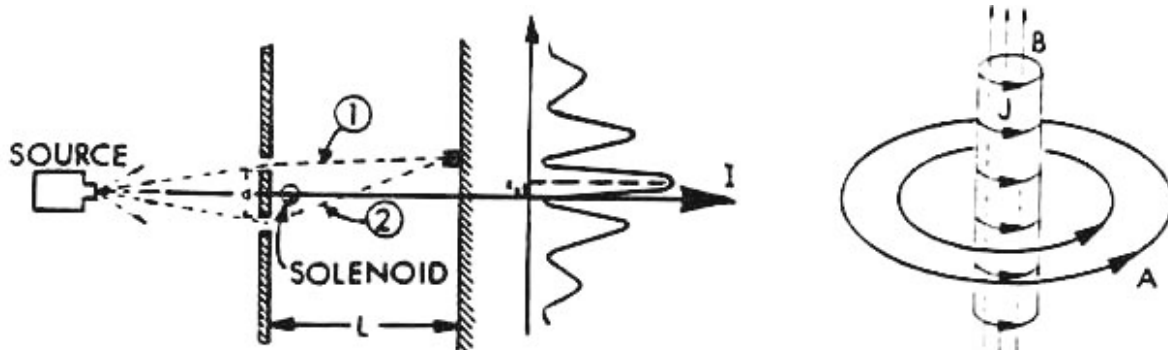
Interference of the potentials is the key mechanism producing real effects in charged particle systems, even in the presence of zero E-field and zero B-field. Unfortunately the AB paper did not address the issue of zero-summed systems of EM force fields as one way of producing artificial potentials having unique characteristics

At any rate, the "AB effect," as it came to be called, was rather hotly resisted and debated over the years, until finally it has generally been accepted as proven in 1986. The principle represents a violation of both classical mechanics and classical electromagnetics. It is required, however, by quantum mechanics and quantum electrodynamics. And experiment has proved it.

(See Y. Aharonov and D. Bohm, "Significance of Electromagnetic Potentials in the Quantum Theory," Physical Review, Second Series, 115(3), Aug. 1, 1959, p. 485-491.).

A-FIELD IS REAL

SLIDE 6.



A – FIELD CAN INFLUENCE THE MOTION OF ELECTRONS.**MAGNETIC FIELD AND
VECTOR POTENTIAL OF A
LONG SOLENOID****THE FEYNMAN LECTURES ON PHYSICS, VOLUME II**

In classical EM, the vector magnetic potential (the A-field) had been defined as a mathematical convenience by the equation

$$\vec{\nabla} \times \mathbf{A} = \mathbf{B}. \quad [1]$$

But if the potentials are real, then conceivably the A field can be loosed from its enchainment to the $\vec{\nabla} \times$ operator. In that case, it becomes a free, new, and independent field of nature with potentially unique characteristics. For example, its defining equation shows that magnetic force field can be made from it, and the rightmost term of the equation

$$\mathbf{E} = -\vec{\nabla} \phi - d\mathbf{A}/dt \quad [2]$$

shows that its time rate of change makes an electric field.

Let us explain this in more simple terms, and somewhat more precisely than conventional theory. We will use the Kaluza unified G-EM interpretation and electron flow in our explanation.

In the A-field, we have a certain kind of 5-dimensional G-potential which can bleed-off as EM force fields in two ways: (1) in a swirl fashion, where the vortex producing the swirl moves parallel to electron movement, and the swirling is a torque or spin, and (2) in a linear fashion, where the time rate of change of the A-potential produces a linear E-field on the electrons.

The first bleed-off as given by equation [1] constitutes the magnetic B-field, and the second bleed-off as given by the rightmost term of equation [2] creates a component of the overall electrical E-field. (Bleed-off of the electrostatic scalar potential produces the other component of the E-field).

Now in general relativity (GR) theory, "the" G-potential is just a conglomerate of many things, each of which has the characteristic of curving spacetime. "The" gravitational field is not a single thing at all, but is composed of a collection of many things.

Thus if we realize that both the electrostatic scalar potential (ϕ -field) and the magnetic vector potential (A-field) are components of the 5-d G-potential, then we see immediately that bleed-off of these two components of the 5-d G-potential creates all normal EM force fields.

It follows that, if we produce a zero-vector summation of the two or more EM bleed-offs, we are actually "putting as much back in" to the 5-d G-potential through its A and ϕ components as we are taking out electromagnetically. In that case, the 5-potential is in a state of equilibrium with respect to EM bleed-off. It is now forced to bleed-off in the only other way it can: as ordinary 4-dimensional gravitational field. Thus by vector-zeroing EM force fields, we turn EM field energy into G-field energy and vice versa, via the intermediary of the 5-potential.

At any rate, soon after publication of the Aharonov-Bohm paper, experiments showed that, if the magnetic field is trapped inside a long solenoid, a phase shift still is induced in the two-slit electron experiment, even though -- classically -- no contact of the enclosed magnetic field and the moving electrons occurs. This phase shift is explained by the fact that the freed A-field exists outside the trapping solenoid, even though the B-field does not. Consequently, interaction of this free A-field with the electrons produces a phase shift of the QM interference detection pattern.

This proves that A-field is real and causes physical effects.

It also proves that a form of action at a distance is real, just as required by quantum mechanics.

Years ago, Frank Golden and this author -- together with Dr. William Tiller -- experimented with "free A-field" devices. Golden went on to develop prototype transmitters and receivers and a prototype underwater communication system.

Since that time, Gelinas has patented several curl-free magnetic vector potential (free A-field) devices: see U.S. patent no. 4,447,779, May 8, 1984; 4,429,288, Jan. 31, 1984; 4,429,280, Jan. 31, 1984; and 4,432,098, Feb. 14, 1984. These patents are assigned to Honeywell.

(See also Theodor Kaluza, Sitz. Berlin Preuss. Adad. Wiss. 966, 1921.).

QUANTUM NON-LOCALITY

SLIDE 7

"THE NON-LOCAL ASPECT OF QUANTUM SYSTEMS IS ... A GENERAL PROPERTY OF NATURE, AND NOT JUST A FREAK SITUATION MANUFACTURED IN THE LABORATORY."

PAUL DAVIES, SUPERFORCE, 1984, P. 48

Indeed, quantum systems exhibit nonlocal effects which are general properties of nature. These effects are not just a freak situations manufactured in subtle laboratory experiments.

However, if spatial coherence in such microscopic effects can be induced and sustained, then action-at-a-distance can be obtained in large macroscopic systems. This is the engineering aspect of the scalar EM approach.

It is also the aspect which the Soviets have secretly weaponized for over three decades.

The zero-vector EM force-field summation of multiple EM waves is used to transport specific time-phased patterns of EM polarization of vacuum to a distance. There interference of two or more such patterns results in the interference of the internal patterns, breaking of the phase relations, and appearance of positive (added) or negative (extracted) EM energy in the intersection region.

VECTOR MATHEMATICS HAS A FUNDAMENTAL PROBLEM.

SLIDE 8

IN ITS AXIOM FOR THE ZERO VECTOR, VECTOR ANALYSIS DISCARDS ZERO-VECTOR SUMMATIONS OF ACTIVE SYSTEMS OF VECTORS.

VECTOR ZERO IS MADE THE ABSENCE OF ALL VECTORS.

[IT CAN ALSO BE THE PRESENCE OF REAL VECTORS WHOSE VECTOR SUM IS $\vec{0}$].

In its concept of the zero vector, vector mathematics discards zero-vector summations of active systems of vectors. It replaces such a summation with a zero vector. This is fine for mathematics as an abstract system, but it is in error when applied to real electromagnetic force fields of nature.

In the abstract mathematics, a vector zero summation is made the "absence of all finite vectors". Further, all vector zeros are made equal. No concept of the "internal stress" of the zero vector exists in abstract vector mathematics.

However, physically the zero summation or "balancing" of vector forces in a medium represents stress in that medium. In the physical case, a vector zero summation system of non-zero vectors has a dynamic substructure, and this substructure is an individual.

Obviously, in the physical case vector zero summations may materially differ, both in the pattern of stress and the magnitude of stress. They cannot all be equated. Further, they are not the absence of vectors, but represent the presence of vectors in a special manner. Such a zero summation of EM vector forces directly stresses the "medium" -- which may be the vacuum itself.

In the physical case, several changes to the axioms of abstract vector mathematics are required. (1) the "potential" of a vector zero must be taken into account, such as is represented by the sum of the squares of the magnitudes of its vector components. (2) the specific deterministic pattern of the vector components comprising the zero must be taken into account. (3) The dynamic variation in both the deterministic directions and deterministic magnitudes of the components and of the overall pattern must be

taken into account. (4) Frequencies of the changes in the direction, magnitude, and actual makeup of the vector zero must now be accounted for. That is, time and wavelengths are rigorously aspects of the vector zero, and these may be deterministic variables. Since time itself is now a variable aspect of the vector, the vector zero system can affect its "rate of time flow" in the observer's system. (5) Since a "reference vector zero" can be established at any point of a vector magnitude, then individual vectors themselves may have dynamic substructures inside a special "zero reference" in and on the vector. The patterned potential of a vector is a reality.

This leads to a system of "vectors nested inside vectors" ad infinitum. In other words, it leads to an infinite-dimensional system, and the "opening" of every finite closed vector system through its vector zeroes.

For application to physical electrogravitational systems, at least 5 dimensions are required, four of space and one of time.

Here we still are considering only a special case where all vector zero summations represent EM force field energy locked in a gravitational potential, or gravitational force field energy locked inside the EM potentials. That is, we are prescribing a system where the only intertranslation of energy is among mass, EM field, gravitational field, and vacuum virtual energy (anenergy).

(See T. E. Bearden Toward a New Electromagnetics: Part III: Clarifying the Vector Concept, Tesla Book Co., 1580 Magnolia, Milbrae, CA 94030, 1983; Part 4: Vectors and Mechanisms Clarified, 1983. See also E. T. Whittaker, Proc. Lond. Math. Soc. 1, 367, 1903; Robert Bruce Lindsay and Henry Margenau, Foundations of Physics, Dover, New York, 1963, p. 283-287; Richard P. Feynman et al, The Feynman Lectures on Physics, Addison-Wesley, New York, Vol. 1, p.2-4.).

THE ZERO-VECTOR AXIOM

SLIDE 9

- **"THERE IS A UNIQUE VECTOR, $\vec{0}$, IN V (THE VECTOR SPACE) SUCH THAT**

$$\vec{V} + \vec{0} = \vec{0} + \vec{V}$$

$$0_i = 0_j$$
- **THIS MAKES ALL $\vec{0}_i$ EQUAL BY ASSUMPTION, SINCE THERE IS ASSUMED TO BE ONLY A SINGLE TYPE $\vec{0}$ WITHOUT REAL COMPONENTS**

This slide shows a standard mathematical statement of the zero-vector axiom, used in many texts.

As can be seen, all zero-vectors are made identical, and no substructure is considered.

Such an abstract system of vector mathematics does not fit physical reality. However, when all one's EM foundations concepts are strongly conditioned in this fashion, the gravitational aspects of EM are discarded.

Further, EM theory, experiments, and equipments will be developed along these limiting lines. In that case, EM engineering of gravitational effects will not be developed. One will assume that $\sim t \sim s$ impossible to have a locally curved spacetime, and hence all local frames will be Lorentz frames. Therefore the conservation laws will rigorously apply.

Further, the nonlocal quantum effects will stay firmly in the microscopic world where they belong. Physical macro-reality will stay stable and predictable in a classical manner.

General relativity (in curved spacetimes) will be restricted to the special case of the local special relativistic (uncurved) spacetime, with only distant perturbations (spacetime curvatures).

The world will stay sane and "normal", and the totally variable insanity of physical reality will remain bottled up in the minute microworld or the distant maelstrom of suns, stars, black holes, etc.

The Aharonov-Bohm heresy will stay kaput in the real world and will not be unleashed beyond mesoscopic reality -- a few thousand angstroms or so.

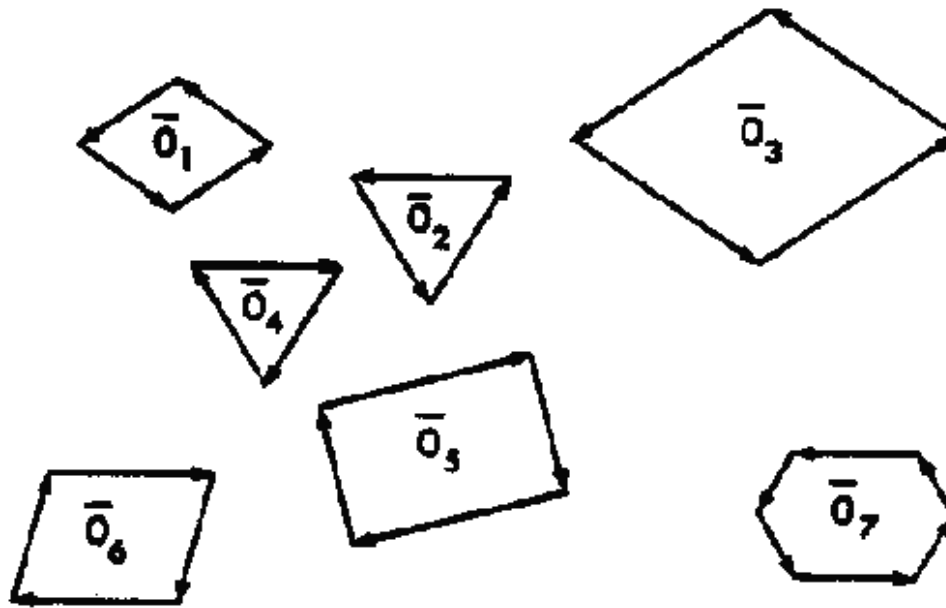
With such an error in the application of vector mathematics to physical science, we become "flatland physicists," so to speak. We become like skimmer bugs on the surface of a pond; we have no appreciation of the dynamics of the depths below or of the heavens above.

Worse, we condition our development of instruments according to the fixed notions in our heads. Then we use these "biased" instruments to do experiments which reaffirm our notions. Any deviation suggested to this is considered heresy and nonsense.

And as Max Planck once pointed out, you will get a new physics only when the old physicists -- who so adamantly oppose it -- die off.

ARE THESE SYSTEMS EQUAL?

SLIDE 10



Shown here are some representations of various very simple zero-vector systems. As can be seen, the stress magnitudes and the spin and dynamics of all of these systems are very different.

Further, their "stress potential" substructures are not composed of a huge collection of little random force vectors. Instead, their substructures are deterministic. If the components being put into the zeros are varied in direction and magnitude, but always sum to a zero resultant, then highly complex substructure dynamics may be created and utilized, infolded (Bohm's term) inside the zero vector.

In theory one can establish "channels" of communication and power (magnitude) transmission without ever surfacing a nonzero EM force field. In practice one can do this with very little EM spillout. Thus one can establish electrogravitational channels and energy transmission inside normal EM potentials and/or ordinary EM carrier waves.

One can use a conventional system of EM potentials, force fields, and waves as a special kind of "wiring circuit" in and through which to transmit and produce electrogravitational effects. By distant interference, EM effects at a great distance can be accomplished, yet no "ordinary EM energy" has passed between the transmitters and the distant interference zone.

INFOLDED SYSTEMS ARE EXCLUDED BY PHYSICS

SLIDE 11

**DYNAMIC ZERO-VECTOR SYSTEMS
ARE NOT CONSIDERED IN
ORDINARY GENERAL RELATIVITY,
CLASSICAL ELECTROMAGNETICS,
OR QUANTUM MECHANICS.**

Unfortunately, these infolded dynamic zero-vector systems have been eliminated from physics.

They are omitted in classical EM, ordinary general relativity (OGR), and quantum mechanics.

That is, they have been omitted in Western physics.

They have not been omitted in secret Soviet weapons labs and weapons development programs.

KALUZA GEOMETRY

SLIDE 12

- **THEODOR KALUZA, POLISH PHYSICIST**
- **UNIFIED THEORY OF ELECTROMAGNETICS
AND GRAVITY [1921]**
 - **5-DIMENSIONAL SPACETIME**
 - **5-DIMENSIONAL GRAVITY FIELD**
 - **ELECTROMAGNETISM IS THAT
PART THAT OPERATES IN
THE FIFTH DIMENSION**

In 1921, **Theodor Kaluza**, a Polish physicist, published a unified theory of electromagnetics and gravitation.

His paper was recommended for publication by **Albert Einstein**, who had had the paper for two years.

In that theory, five dimensions -- four space and one time -are utilized in the basic model. This gives a 5-dimensional spacetime.

In the model, electromagnetics and ordinary gravity are two aspects of a single more fundamental field: the 5-space gravity field.

Electromagnetism is that part of the 5-field that operates (bleeds-off) in the fifth dimension.

The ordinary 4-space G-field is the small residue that spills over into our ordinary 4-space, and doesn't slide around into the fifth dimension and bleed-off there as electromagnetics.

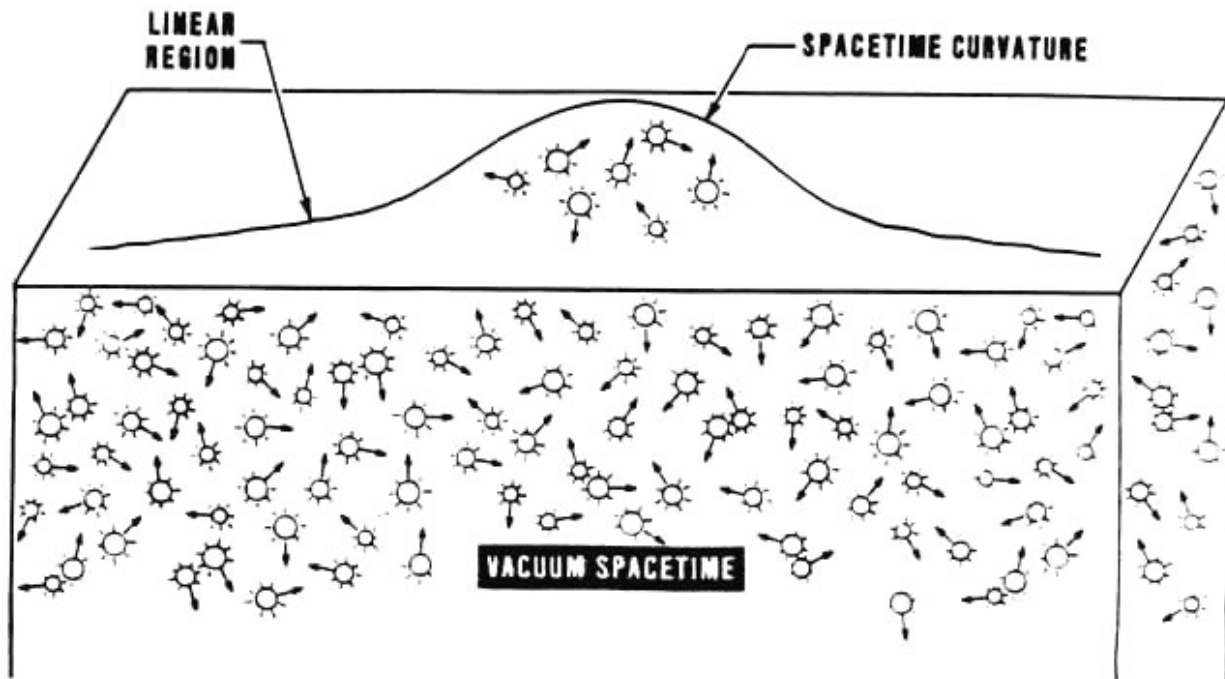
Implicit in the theory, but not explicitly stated, is the fact that the 5-space G-potential bleeds-off in two fashions: (1) in the 5th dimension nearly unopposed, to produce what we see as EM force fields, and (2) in the ordinary 4-space we live in, which we see as ordinary gravitational field.

Normally almost all the force field bleed-off is in the fifth dimension as EM; only a minuscule bit bleeds off as 4-gravity.

Just as one example, between two electrons the 5-space G-potential bleeds-off into electric force field about 10^{42} times as much as it bleeds-off into 4-space G-field.

A POTENTIAL IS A CHANGE IN THE STRESS OF VACUUM.

SLIDE 13.



In physics, the idea of a "potential" is very poorly defined, if at all. The normal "definition" for the electrostatic scalar potential, for example, is not a definition at all. Instead, it's an abstract operation that tells how to mathematically calculate the magnitude of the potential, by pushing a unit charge in from infinity, against the potential field.

Now ultimately a definition must be an identity statement, not an operational statement about something.

Since I could find hardly anyone who actually understood what a potential was, and how or of what it was composed, I simply took quantum mechanics at face value and constructed this model.

First, the modern view of the vacuum is that it is not an emptiness, but a plenum. It's teeming with an incredible amount of raw energy, existing totally as the temporary bits of energy of virtual particles. That is, the vacuum "energy" exists as the nonintegrated energies of little particles which appear from nothing (are spontaneously created) and disappear into nothing (are spontaneously annihilated) almost instantly. This happens so fast that the little particle and its energy cannot individually be detected; it doesn't hang around long enough.

Hence the fleeting little booger is called a "virtual" particle. Like, "We had 'im there, man, for just a moment, but he was gone before we could grab 'im!"

This kind of ghostly particle, however, is very real in modern physics. All observable forces are theorized to be due to the integration or collection of a large number of virtual forces created by exchange of these little particles.

However, this implies a peculiar thing about the vacuum energy." Actually it's vacuum energies, for each little bit of energy only exists momentarily, Then returns to the nothingness from which it came. That is, vacuum virtual energies are totally unintegrated. Each "bit" of virtual energy exists individually. These virtual energies cannot be "added up" to compute the "available energy" unless some collector or integrating mechanism puts them together.

That is, unless some kind of "zipper" is there to "zip them together" into macroscopic, observable energy. The usual "zipper" is a spinning, observable particle of mass. We say that the vacuum energy is unzipped and hence unobservable in that state. We say that "observable energy" is just zipped-together vacuum energies -- integrated by and on a spinning, observable particle of mass.

So the vacuum can be visualized as a special sort of violent, unzipped plasma, where the particles of the plasma are fleeting and do not last. We can speak of it also as a sort of special unzipped gas, in the same manner.

The "pressure" of the vacuum gas we refer to as "stress." Due to its violent boiling activity, the vacuum gas is always under very high stress.

This "stressed virtual plasma" identically IS the vacuum and identically IS spacetime. Length, time, frame, mass, etc. -- all arise by zipping operations (or understood zipping operations) in and of this raw vacuum/spacetime. When one uses the vacuum notion in this manner, one now uses the term "ether" again. However, this is not the old "thin material ether that hangs around"; this is an entirely new kind. It's a virtual flux and a virtual plasma.

The ether is also what we call "spacetime" in relativity. As can be seen, spacetime is stressed. Further, spacetime has a substructure.

By an uncurved spacetime, we mean one in which the stress of these virtual particles (the "pressure in the ethereal gas," so to speak) is constant from one place to another and from one time to another. Indeed, we also should mean that the stresses of the individual components of the entire plasma are constant from one place to another and from one time to another.

By definition, when we determine the lengths between every two points, we determine a frame. (Actually, we have prescribed a universal "length zipping" operation/mechanism as well as its characteristics.). A "linear frame" or "Lorentz frame" is one in which the pressure or stress remains constant. It may be higher than ambient vacuum, however, due to a particle's or an object's motion through the observer's ether. In the case of constant velocity, the particle/object encounters a higher level of virtual particle flux in the observer's ether, like a vehicle moving through raindrops. It encounters a constant rate of flux, however. In such constant velocity case, the moving object's frame is said to be "rotated," but not curved, with respect to the laboratory frame of the observer.

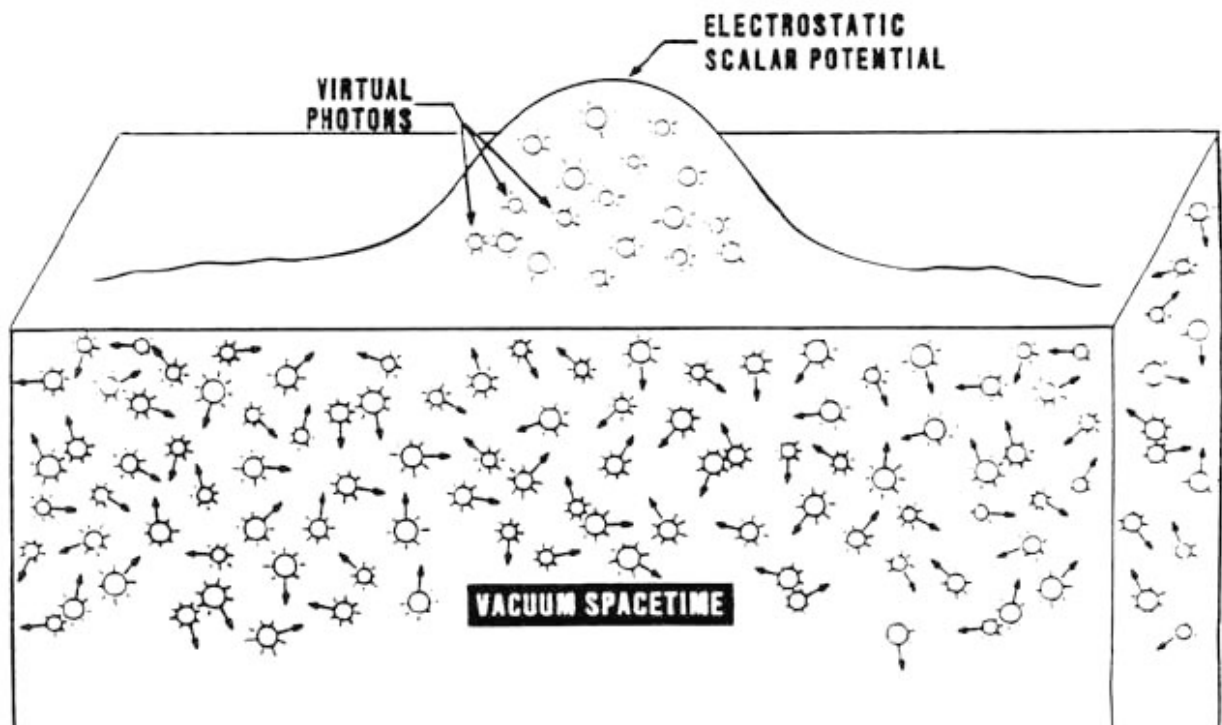
In a "curved" spacetime, we mean one in which the stress of vacuum increases or decreases from one place to another, or from one time to another, or both. At one fixed location, if spacetime is curved, then the stress is increasing or decreasing as a function of time. That is, the flux density of that area is changing. We may visualize the local frame as undergoing angular acceleration, rotating more or rotating less. This is a non-Lorentz frame, or curved spacetime. It is also a nonlinear vacuum.

In such a vacuum, local gradients exist in the flux of virtual particles. If affected by (coupled to) one or more of these gradients by a nonzero coefficient, a local object experiences effects (forces and actions) "without observable cause." Observably, conservation laws may be locally violated by these "virtual rivers" of vacuum by coupling, just as a paddlewheel dipped in a river violates its own local "conservation of energy" due to the river providing an energy source to it.

One must be very careful with the "pressure" analogy, however, when one utilizes unified theory (Kaluza theory). We now have a virtual plasma vacuum in five dimensions, not four. But the basic notions to enable our visualization and understanding still apply.

TYPE OF POTENTIAL DEPENDS ON THE PARTICLE(S)

SLIDE 14



Now one can see that, by choosing the type or class of virtual particle, and looking at its potential or stress in the vacuum, one can have many kinds of "potentials" existing in the overall "gravitational potential" of vacuum spacetime.

For example, the stress of the virtual photon flux (which is what causes electrical charge) is called "electrostatic scalar potential."*

We can choose any other class of virtual particle we wish, and there exists a potential (and "change") for it. There are quark potentials, neutrino potentials, etc.

Indeed, one of the reasons for ignoring Kaluza unified theory for so long was that it predicts a great many types of potentials and fields which have never been observed and which are unknown. Approximations which neglected all these mysterious, and unknown fields gave erroneous results. Perplexed physicists, seeking to simplify matters, simply turned away from it in frustration. They returned to it in the mid-70's when it appeared that 11-dimensional Kaluza-Klein theory possibly offered a complete unified theory.

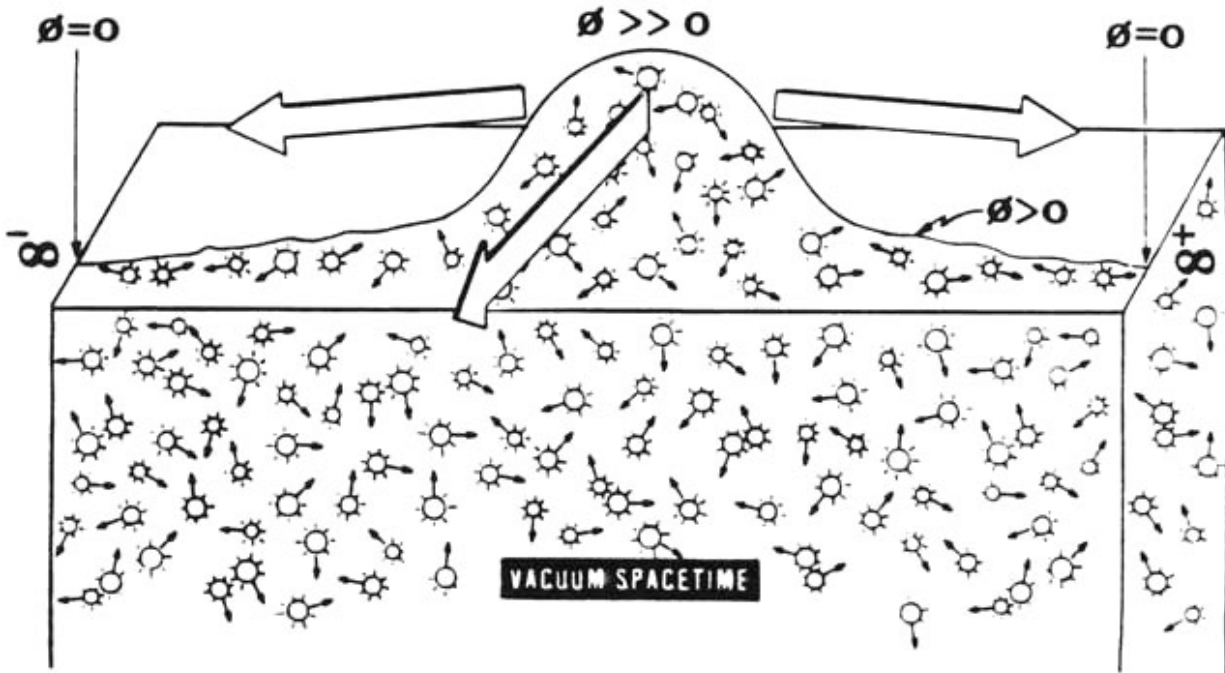
Actually, the diversity of new fields in Kaluza theory was its strength not its weakness. That they are presently unobservable and undetectable is beside the point. Neither is time directly observable; however, we have worked out handy procedures and measurements of spatial quantities which allow us to infer time. We have not just tried to drop it from physics!

And indeed the Kaluza theory is consistent with experiment when the higher fields are included. The message is, we must work out "clocks" for these new potentials and fields, so that they can be inferred with at least some degree of precision

* The character of movement also determines the type of potential. The longitudinal (radial) movement of the virtual photon flux is implied in electrostatic scalar potential. The swirl (tangential) component of this flux might be taken as the magnetostatic scalar potential -- a magnetic pole -- when the cw and ccw components of the swirl balance, but the sum of their absolute values differs from the sum of the absolute values of the corresponding tangential components in the swirl flux of the local ambient vacuum. If this swirl stress is higher than the vacuum swirl stress, this constitutes a north magnetic pole. If lower, it constitutes a south magnetic pole. If there is a prevalence of direction (cw or ccw) in the swirl (i.e., one component exceeds the other), this corresponds to the magnetic vector potential (the A-field) when the A-field is freed from the magnetic force field (B-field) -- i.e., when A-field is freed from its $\nabla \times$ operator in the equation $\nabla \times A = B$. The bleed-off of the excess swirl stress from the north magnetic pole to the deficient swirl stress of the south magnetic pole constitutes the magnetic force field, B -- usually referred to simply as the "magnetic field".

A POTENTIAL EXTENDS TO INFINITY AND INVOLVES THE ENTIRE UNIVERSE

SLIDE 15.



As shown on this slide, the change in the stress of vacuum due to a potential tapers off to infinity. Its magnitude normally does not reduce to zero until infinity.

Some types of potentials reduce much faster or slower than others, however, and so – at some distance away from a common origin of the potentials, one or more may be neglected in its (their) overall effects on an experiment or system.

Also, the speed of propagation of potential is highly dependent upon (1) what type of virtual particle or particles produce its stress, (2) its magnitude, (3) its composition, and (4) the presence or absence of coupling objects and other interacting potentials.

Fundamental observable particles are like little spray pumps and little vacuum cleaners at the same time.

Each is emitting virtual particles into the vacuum in a spray or flux, and at the same time it is absorbing virtual particles from the vacuum spray or flux. It's a little dynamo, and nature furnishes its driving energy unceasingly.

However, each little virtual particle it emits is itself such a little simultaneous pump and vacuum cleaner. That is, it's also emitting an even finer (and faster) flux of smaller virtual particles, and at the same time it's also absorbing flux at this time finer level.

"Bigger fleas have smaller fleas to bite em;

And so on ad infinitum".

We may consider the vacuum to be made of an infinite number of virtual state layers or levels.

It is not too difficult to show that each of these successively deeper, nested "layers" of virtual state corresponds to a successively higher dimension being added to our 4-space basic spacetime. So hyperdimensions and deeper levels of virtual state are one and the same thing.

The basic "speed" of the first layer is c , the speed of light.

The basic "speed" of the second layer is c^2 .

And so on.

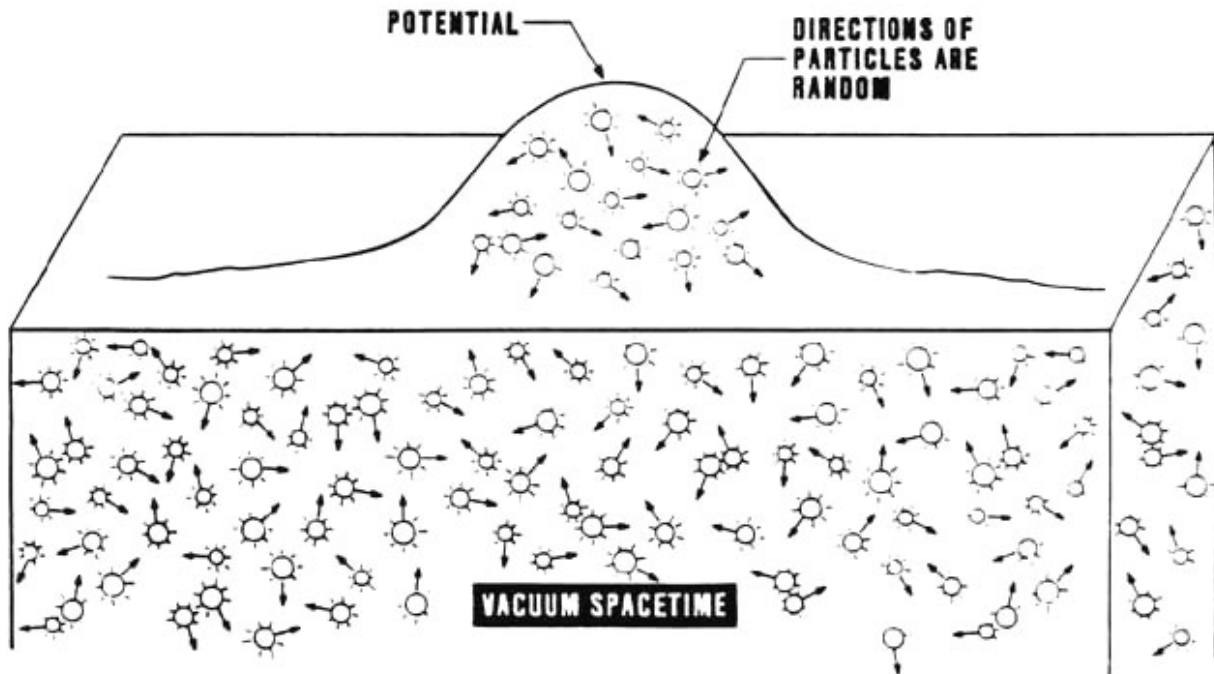
This is interesting. We may directly engineer the virtual state by means of the vector zero (scalar electromagnetics) approach. By nesting vector zeros inside other vector zeros, we may directly engineer the deeper layers of virtual state, and consequently hyperdimensions.

Scalar electromagnetics thus is virtual state engineering and hyperspatial engineering at one and the same time.

Superluminal communications systems, hyperspace drive, and materialization and dematerialization are all hypothetically possible, using scalar electromagnetics. As the technology develops, we should see the development of many of the systems long thought impossible except in science fiction.

A NATURAL POTENTIAL

SLIDE 16



There are two broad categories of EM potentials, depending upon the way in which they are formed.

The two categories of potential formation are: (1) natural, and (2) artificial.

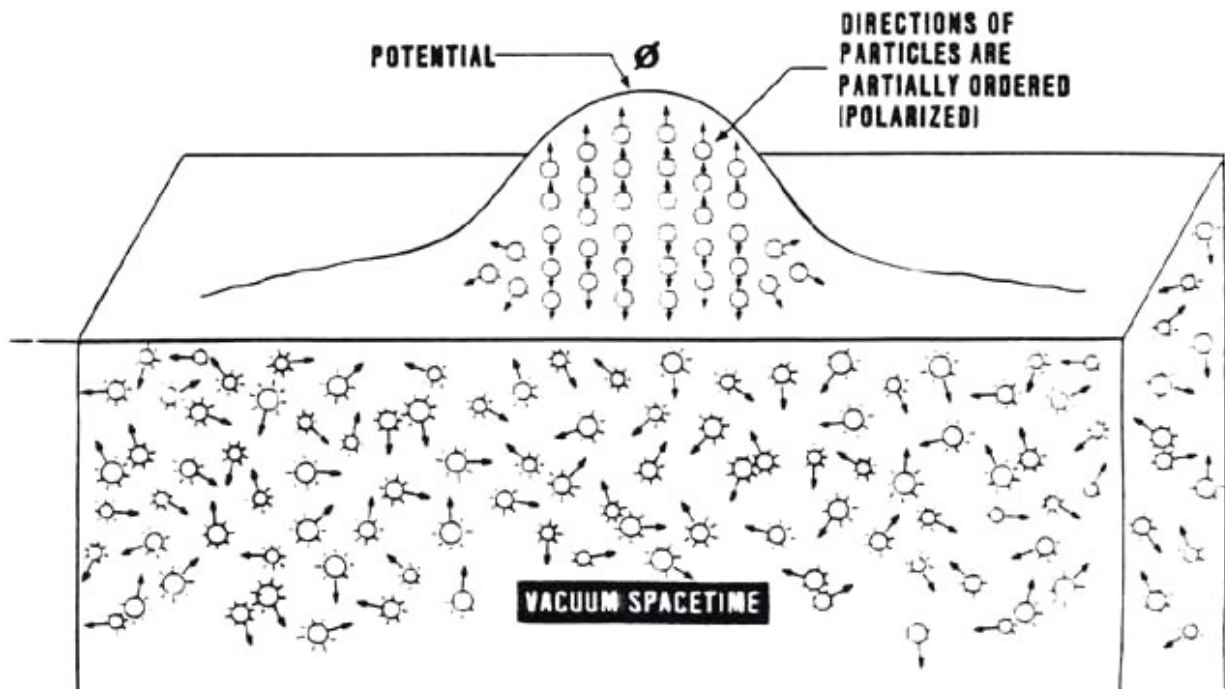
The difference is in the virtual particle flux substructure that comprises the potential.

If the substructure of emerging and vanishing virtual particles is random and without deliberate order (polarization) except in one broad, overall sense, then that is a natural potential. As such, there is no deterministic functioning going on inside the substructure of the potential itself. The potential can only act "as a whole" on a charged particle system.

Natural potentials have substructures of random virtual vector components. Any small amount of coherence as a function of distance vanishes quickly (on the order of a few thousand angstroms at most, according to present Aharonov-Bohm experiments).

AN ARTIFICIAL POTENTIAL.

SLIDE 17



An artificial potential by definition has a substructure composed of deterministic observable vector components, summed to an overall zero vector. Coherence as a function of distance can be maintained over enormous macroscopic distances -- even hundreds of thousand of kilometers -- by simultaneous transmission of the entire cluster of substructure components as a coherent "zero" group.

To the conventional linear EM detector, at any point along its transmission path, this substructure is detected as a zero-E vector and a zero-H vector. Hence the conventional detector does not see the artificial potential, even if its "stress magnitude" (a function of the magnitudes of all summed components) changes.

Action at a great distance is possible with this artificial potential, however, if a highly nonlinear situation is met so that the phasing of the components is broken or significantly altered. In that case, the components do not sum to zero after their dephasing, and real EM force fields emerge. This "dephasing" can be made to occur at the distant nonlinearity.

Action at a great distance is not possible with the natural potential, but is possible with the artificial potential.

Further, with the transmitted artificial potential, VO must be applied from the transmitter to the distant interruption zone, as if there were no intervening space between.

Note that VO may be positive or negative. Thus energy may emerge at the distant disruption, or be extracted from there. In the first case, energy is input to the transmitter, to re-emerge at the distant dephasing zone. In the latter case, energy is extracted (disappears) from the distant dephasing zone and is received (reappears) back at the transmitter

PRODUCING AN ARTIFICIAL POTENTIAL.

SLIDE 18

- **MAKE AN ARTIFICIAL SPACETIME STRESS**
 - OPPOSING E-FIELDS
 - OPPOSING B-FIELDS
- **FORCE FIELDS SUM-ZEROED**
 - SCALAR FIELD
 - ZERO VECTOR FIELD
 - E AND B FIELD COMPONENTS STILL EXIST AND ACT
 - ENVELOPE IS ZERO-VECTOR

- ENVELOPE IS SCALAR
- DYNAMIC SUBSTRUCTURE EXISTS

- ENGINEERS BOHM'S "HIDDEN VARIABLES"
- BENDS SPACETIME

An artificial potential is deterministically patterned spacetime stress, made by opposing E-fields and/or B-fields so that they sum to vector zeros in a special pattern.

The resulting zero-summed envelope has no EM force field, to an external observer/detector.

However, the infolded E-field and B-field vector components still exist and act. They may dynamically vary, so long as their summation is always kept to zero.

The simplest variation is to vary all their magnitudes at once, by the same degree. In that case, each one comprises an "EM wave." However, the summation of this cluster or "locked group" of waves still exhibit a zero-E and zero-B field to any external observer/detector. In other-words, to an external observer, one now has a varying wave of pure spatiotemporal stress, but one which has a deterministic structure. This is a scalar EM wave, or electrogravitational wave. It is also an alternating current of specific scalar pattern.

Varying the stress of spacetime locally, curves it locally. This violates the conventional assumption of restricted general relativity that local spacetime is uncurved (is a Lorentz frame).

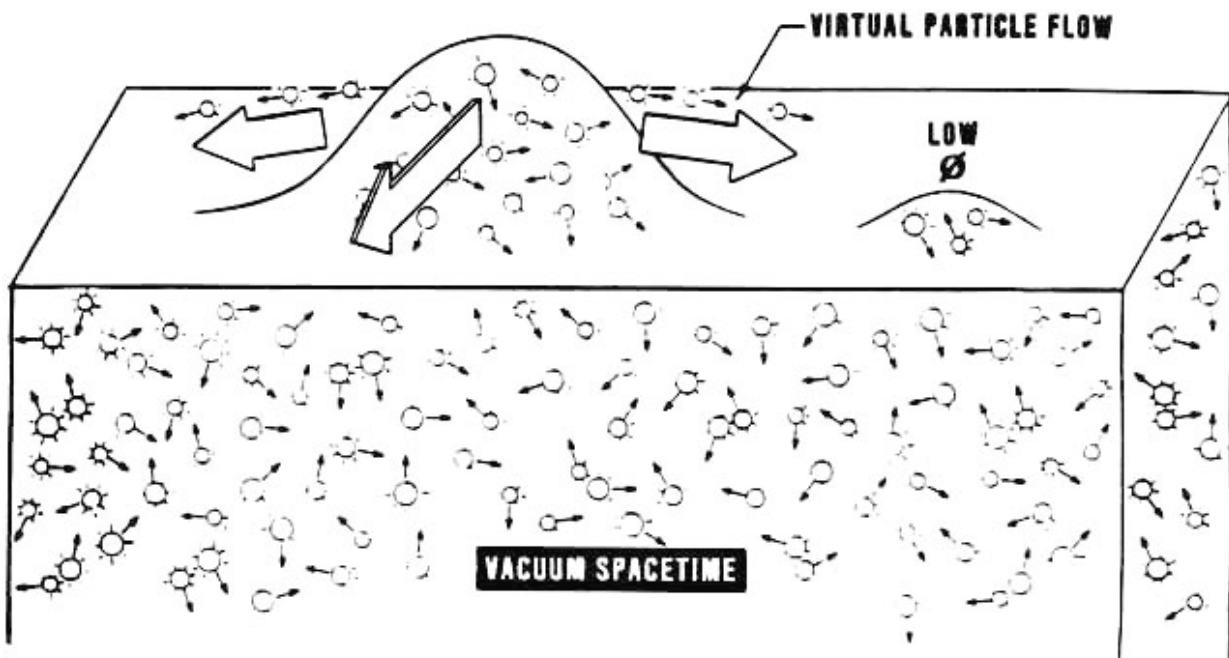
By use of scalar EM waves with deliberate substructures, one can engineer Bohm's "hidden variables" so that quantum mechanics becomes deterministic rather than statistical. This is a drastic change to the common (Bohr) interpretation of quantum mechanics.

And Einstein's intuition that God does not play dice with the universe turns out to be correct after all.

Since physicists haven't seen where the real game was being played, it has all seemed bewilderingly statistical to them.

IF NO OBSERVABLE MASS FLOWS.

SLIDE 19



Since there are no observable mass particles flowing in vacuum, there are no observable force fields produced. Only virtual force fields can be produced in the virtual particle medium that is vacuum itself.

Thus there is no observable E-field in the vacuum surrounding a charged point. There is, however, a virtual E-field there. When an observable charged particle such as an electron is introduced in the surrounding vacuum and "couples to" (integrates, zips together) the virtual E-field, an observable E-vector force is produced on and of the observable charged particle.

(For the classically trained electrical engineer or electrical physicist, the statement that no E or B fields as such exist in vacuum, is usually bewildering. Let me point out that any so-called "vector field" (such as the assumed E and B vacuum fields) can mathematically be replaced with two scalar fields. See E. T. Whittaker, Proc. Lond. Math. Soc. 1, 366, 1903. What we are saying here is that the definition of an E field is in terms of force per unit charged mass. The scalar fields -- which are actually what exist in vacuum -- provide only a virtual or unzipped E field, until an observable spinning particle couples to both of them by virtue of its "dynamo flux pump" action. The ensemble, then, of two electrostatic scalar potentials coupled to a spinning observable particle, constitutes and is the so-called "E-field.")

When detecting these "vacuum E-fields," it is the free electrons in the electron gas in our probe or antenna which couple to the two "Whittaker scalar fields". These electrons produce ensembles which interact with each other collectively. Charges in this electron-gas coupled medium is what we actually detect -- not "what is in the vacuum."

To repeat this again for emphasis: The usual detector is an "electron-wiggle" detector. It detects changes in its own conduction electron gas, not in the vacuum itself. That is, the disturbance in the virtual-particle vacuum interacts with the observable particles of the electron gas, if (and only if) the spins of these observable particles couple the vacuum disturbance to the electrons and integrate their virtual components. After integration, an observable disturbance of the integrating object -- say, the electron -- results. It is this electron gas disturbance that is "detected" by almost all orthodox EM detectors.

If the spin of the observable conduction electrons cannot couple the electron to the vacuum flux disturbance, then the disturbance will not be detected by the normal "simple" detector. (By a "simple" detector we mean one in which the electrons are able to couple to the vacuum disturbance! Little circular definition here!)

Now most potentials reach to infinity before reducing to zero. The change in the virtual particle flux intensity of vacuum -- which comprises the potential -- decreases with distance from the potential. The magnitude of the change tails off toward zero as one approaches infinity.

To any finite distance, then, there exists a decreased gradient in the change of the virtual flux intensity of vacuum, from a potential. Therefore virtual particles are flowing in the direction of the decrease of this gradient, just as gas molecules flow from a region of high pressure toward a region of lower pressure.

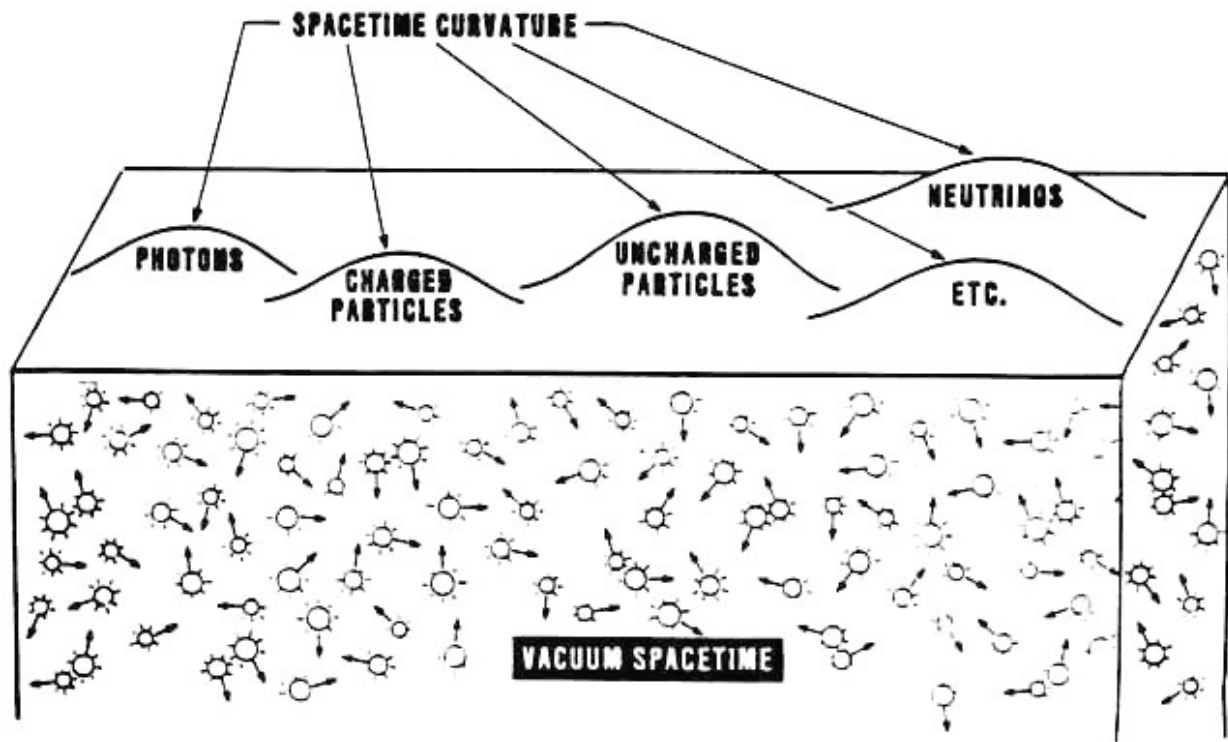
So there is a virtual particle "river" in the vacuum between any two separated points of different potential magnitude. The type of virtual particle(s) in the river is determined by the type of potential .

If the potential is natural, the gradient river does not carry any coherent substructure.

If the potential is artificial, the gradient river carries the coherent substructure everywhere within it. In this case, there is a flow or "river" of the virtual structure of this coherent pattern in the vacuum between two separated points of different "potential" in that pattern.

GRAVITATIONAL POTENTIAL: A CONGLOMERATE OF STRESS TYPES.

SLIDE 20.



Rigorously, all EM potentials are actually part of the overall 5-dimensional gravitational potential.

There is no such thing as "the" singular gravitational potential: instead, it is a conglomerate of different stress types and patterns, each of which is named for the type of action that produces it.

Electromagnetic potentials, for example, are created by the movement of charged particles. At any point in vacuum, the potential consists of a flux of virtual particles.

The vacuum contains a great variety of particle fluxes. There are virtual photons, virtual electrons, virtual positrons, virtual protons, virtual pions, virtual neutrinos, etc.

The conglomerate stress from all these virtual particle stresses constitutes the overall gravitational potential.

WHAT GRAVITATIONAL FIELD IS

SLIDE 21

- NO SUCH THING AS "THE" G-FIELD
- G-FIELD IS A CONGLOMERATE OF
 - MANY COMPONENT POTENTIALS
 - MANY OTHER ENTITIES
- G-FIELD IS CURVATURE OF SPACETIME
- ANY COMPONENT(S) OF THE CONGLOMERATE CAN BE USED TO CURVE SPACETIME
- FLOWS CAN EXIST BETWEEN PAIRS, TRIADS, ETC. WITHOUT APPRECIABLE CHANGE

OF THE OVERALL CONGLOMERATE POTENTIAL

- **ALL FORCE FIELDS REPRESENT BLEED-OFFS OF ONE OR MORE COMPONENTS OF G-FIELD**

As previously stated, there is no such single thing as "the" gravitational field, as is assumed in the Newtonian sense.

G-field is a conglomerate of many component potentials and other entities.

Rigorously, anything that "curves spacetime" is a gravitational field.

In the modern view, all forces ultimately arise, by some means, from the curving of spacetime. Thus all forces and force fields are related to – and caused by, so to speak – gravitational field.

If the vacuum stress is uniform from one place to another in an observer's frame, then the observer's spacetime is uncurved. The observer's frame, is said to be linear or uncurved; or a Lorentz, frame. In such a situation the conservation laws rigorously apply for macroscopic, closed systems.

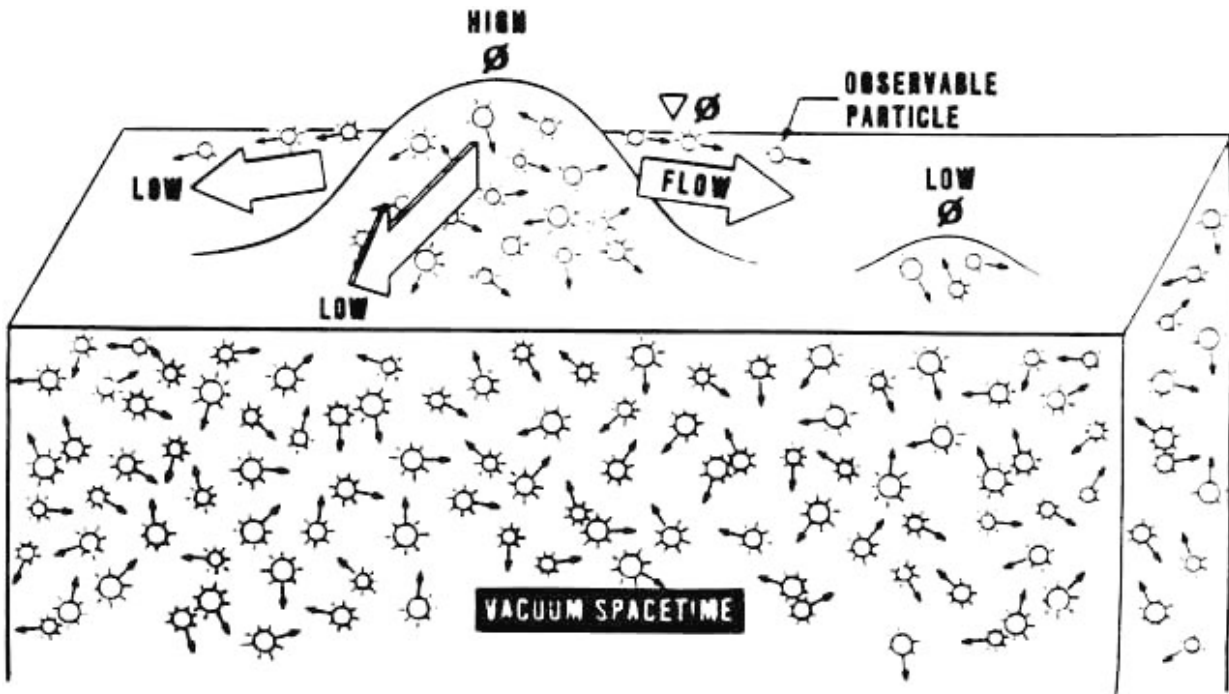
If the vacuum stress is not uniform from one place to another, then the spacetime is curved. In such a situation the conservation laws may be violated for macroscopic systems, since they are "opened" to the vacuum stress, and vacuum virtual particle flux gradients exist across the system or portions of it.

Note that the overall stress magnitude may be constant across a region, but its composition may change. That is, two or more components may vary canonically. In that case, the spacetime is uncurved in the gross external sense, but contains specialized "internal" curvature patterns locally. Depending upon reaction to the canonical infolded curvature patterns, some macroscopic systems will still exhibit conservation, but certain other macroscopic systems may not.

An example is symmetry-breaking. Here charge, parity, and time symmetry may be violated individually or in pairs, but not all three simultaneously. An overall conservation law is obeyed, but any two of the three conservation laws can be (and are) violated.

EM FORCE FIELDS ARE RELEASES OF GRAVITATIONAL POTENTIAL VIA OBSERVABLE MASS FLOWS

SLIDE 22



In Kaluza theory, we may take EM force fields to be the 5th dimensional "bleeding-off" of a 5-G potential. However, in vacuum alone this bleeding-off is totally within the virtual state. That is, only virtual EM force fields exist in vacuum.

By the ordinary term "EM force fields," physics has chosen to imply measureable or observable E and B force fields.

That implies that the 5-G potential gradient flows of virtual particle flux must be coupled to observable charged particles -- such as electrons, protons, ions, etc. -- before observable E and B force fields exist.

Rigorously, E and B force fields consist of the virtual E and B force fields coupled to observable charged particles. They do not "cause" a particle to accelerate; they are the product of the particle and its acceleration.

As these observable particles are themselves "spray pumps" producing virtual particle flux, then a collection of them represents an increased or decreased flux (for negative or positive charge) vis-a-vis the ambient background flux of vacuum. Nature furnishes the continuous power to drive these "virtual flux" pumps.

Normally, EM potentials are formed in natural and manmade electrical circuits by collections of these observable particle "spray pumps." Such collections of increased or decreased "spray flux" density, of course, represent 5-potentials, gravitationally.

Release of these pumps in conductors or in the vacuum itself results in creating E-fields and B-fields on and of the moving observable charged particles. But release of the observable-particle spray-pumps from the collection (the potential "pressure head" or "source") reduces the potential or "pressure" at the source.

Thus the formation of E and B fields represents the release of the 5-potentials. Hence EM force fields are the bleed-off of 5-dimensional G-potential via observable mass flow.

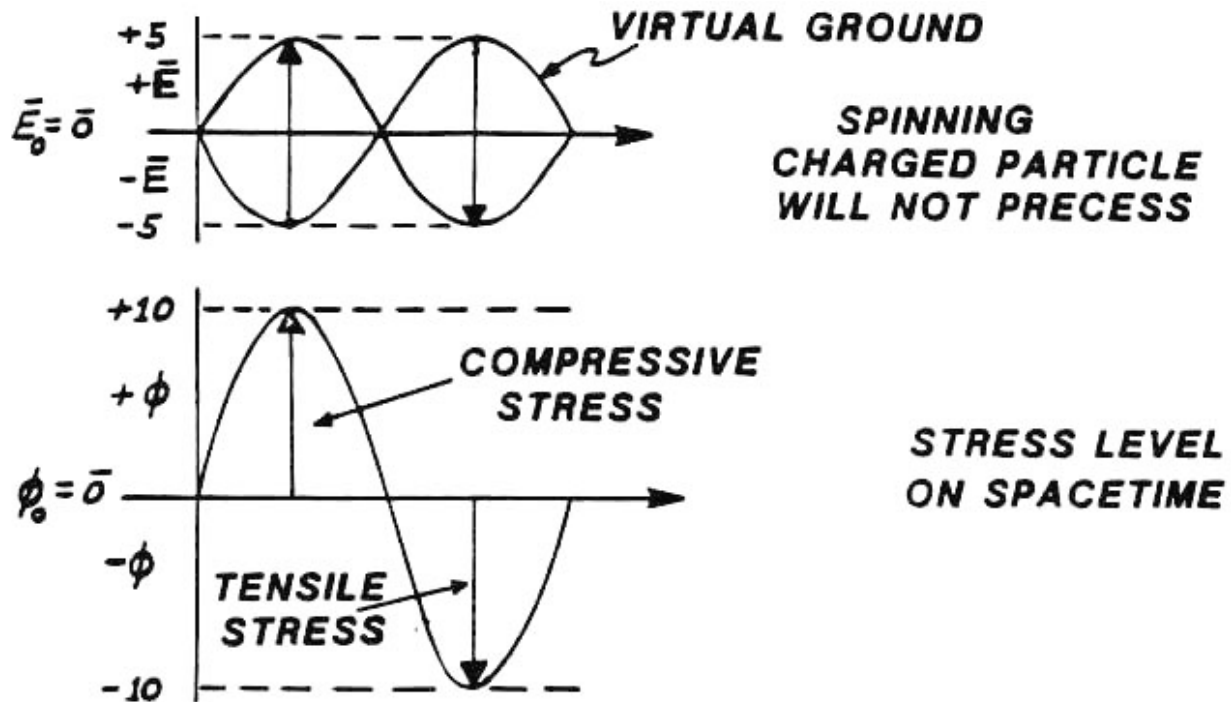
Since classical EM always seeks to create the force fields, it always bleeds-off and discards the gravitational effects that could be otherwise achieved.

To allow orthodox EM flow is to dissipate the gravitational effects.

Strangle the orthodox EM flows, and you can keep and use the amplified gravitational effects.

SCALAR Ø-WAVE PRODUCTION

SLIDE 23



We now visualize the formation of waves of pure stress in the spacetime medium (in the vacuum). These we call scalar EM waves, Tesla waves, electrogravitational waves, longitudinal EM waves, waves of pure potential, electrostatic/magnetostatic waves, and zero-vector EM waves. All these terms are synonymous. Each sheds its own particular light upon the nature of these waves or of their original discoverer, Nikola Tesla.

We use a gedankenexperiment, or thought experiment, in which we can be "perfect."

Thus we have two single-frequency EM sine waves whose E-field components are shown on the slide. The two waves are of the same frequency, traveling together in the same direction, and superposed 180 degrees out of phase with each other.

In this case, at any spatial point, the summation E and B fields are vector zeros.

However, if we plot the spatiotemporal (vacuum) stress induced by the wave, we see that it constitutes a sine wave, with compressive stress in one half cycle and tensile stress in the second half cycle.

Rigorously this defines a "longitudinal" EM wave -- or what Tesla called a "sound wave in the nonmaterial ether."

Also, rigorously it is a gravitational wave, for it is a wave of the curvature of spacetime (nonlinearity of vacuum) itself. That is, what is changing in the wave is the vacuum stress, or intensity of the virtual particle flux of vacuum. That is identical to changing the curvature of spacetime. In one half-cycle, spacetime is curved positively. In the second half-cycle, spacetime is curved negatively.

Since the increase or decrease of the intensity of virtual particle flux (vis-a-vis the ambient vacuum's virtual flux intensity) represents electrical charge, then in one half-cycle negative charge is represented, and in the other half-cycle positive charge is represented. This directly explains the "positron-electron pair" representation of an electromagnetic photon -- the "photon" being one wavelength.

In one half-cycle, time moves slower. In the second half-cycle, time moves faster. Thus scalar waves can also be considered to be "tempic" waves (to use Wilbur Smith's term), or oscillations of the rate of flow of time itself, about the ambient rate of time flow. Since these oscillations are variations in the curvature of spacetime, then they represent gravitational or force-generating waves, when coupled to a mass.

Variations in the rate of flow of time produce force, just as any other type of curvature in space time does.

SCALAR ELECTROMAGNETICS

SLIDE 24

- **ZERO-VECTOR ENVELOPE**
- **DELIBERATE, ORDERED SUBSTRUCTURE**
 - **SPECIFIC PATTERN**
 - **DETERMINISTIC**
 - **CONSTITUTES "HIDDEN VARIABLES"**
 - **PHASING IS THE KEY**
- **TO MAKE A SCALAR BEAM**
 - **USE PHASE-LOCKED FORCE-FIELD BEAMS**
 - **TWO OR MORE**
 - **STANDARD BEAMING ANTENNA**
 - **CONVENTIONAL BASIC CIRCUITS**
 - **SLIGHT CIRCUIT MODIFICATIONS**

To rehash: scalar waves are zero-vector waves. Patterned E and B fields exist in a relationship where their summation equals vector zero. Electromagnetically, the zero EM "envelope" of a scalar EM wave is composed of a zero-summation of infolded finite EM force-vectors.

However, the internal (infolded) substructure is deliberate, macroscopic, and ordered. Vacuum is polarized deterministically by the wave, and macroscopic spacetime is locally curved by it.

These substructure components constitute Bohm's "hidden variables." They can be manipulated and varied at will. Phasing, beaming, frequency, superposition, interference, resonance, and Fourier expansion are the keys to scalar EM engineering.

To make a scalar beam, special modifications are made to the EM wave transmitter so that, effectively, the transmitter transmits multiple transmissions simultaneously, and these vectorially sum to zero. This is the same thing as transmitting multiple phase-locked EM force-field beams simultaneously, in the sum-zeroed fashion.

Standard beaming antennas and conventional circuits can readily be utilized with slight modifications.

Any radar can be converted to a scalar EM radar quite simply. Indeed, a modification kit to accomplish that can be developed and held until the scalar mode is desired. The modification kit can be quickly installed to provide the scalar capability.

Scalar radars, for example, cannot track "corner reflector" targets. However, they can magnificently track smoothly filleted corners; rounded, smoothly curved surfaces; and curved or flat metalized dielectrics. Against aerial targets using special construction to lower their cross-section to normal radars, the application of the scalar radar mode is immediately obvious.

Scalar waves pass through the electron shells of an atom and interact with the nucleus. They are continually absorbed and emitted by all nuclei in the universe.

BACKGROUND FOR THE BRIEFER.

Any large collection of nuclei -- such as a star or a planet -- is a strong absorber and radiator of scalar wave radiation.

The Sun is a particularly strong source of scalar radiation. This radiation penetrates the Earth deeply, interacting more and more with the deeper layers which, under greater mechanical stress, are more nonlinear. Most of the heat in the molten core of the Earth comes from the dephasing of a portion of this absorbed scalar radiation from the Sun, liberating ordinary EM energy as heat.

The Earth also re-radiates scalar wave radiation back to the Sun. The Sun and Earth are thus coupled into a "scalar" system in equilibrium or near-equilibrium. Each body in the couplet possesses both a feed-forward and a feedback loop.

The Earth also radiates scalar wave radiation to the Moon, and the Moon reradiates scalar radiation back to the Earth. The Earth and Moon also are coupled into a "scalar" system in equilibrium or near-equilibrium. Again, each body in the couplet possesses both a feed-forward and a feedback loop.

The Sun and Moon are correspondingly coupled into a scalar system in equilibrium or near-equilibrium, each with both a feed-forward and a feedback loop.

The Earth, Sun, and Moon thus form a triad coupled system of special importance to the stability of our existence here on Earth, and the stability of our biosphere.

And so on with all the other planets in the solar system, and combinations thereof.

The solar system is thus a very sensitive scalar-coupled system, with strong subsystems within it.

ADDED FOR THE BRIEFER:

Actually this scalar coupling of the solar system provides a major check on unrestricted use of the large Soviet strategic scalar EM weapon systems. If significant scalar effects are produced on earth in a "pulse" mode, pulsed disturbance of the earth-sun and earth-moon systems results. Here a danger exists that one or more natural resonances of the coupled system may be excited. If the feedback stimulation of the Sun is not insignificant, for example, large sunspot activity may result sometime thereafter, say in a day or two. If too much or too sharp stimulation occurs on earth, the coupled resonant response from the sun could be disastrous. Indeed, a solar response could be stimulated so that the Sun would violently belch and destroy our biosphere, among other effects. The simplest doomsday stimulation would be for a violent expulsion of Solar EM energy and particles to occur. If this were due to resonance, the expulsion of Solar EM energy and particles would continue during some decay time. In that case, fiery destruction of the earth, strongly indicative of Biblical prophecy, would result. Particularly sensitive are the resonances of the sun-earth, sun-moon, and earth-moon systems.

Note the abnormal influence of the moon on tides -- tides of both the tectonic plates and the oceans. One cannot help but point out that, if the earth-moon resonant system were overstimulated, one might expect violent earthquakes of extraordinary magnitude, and tremendous tidal waves hundreds of feet in height. (The potential connection to legends of earth-destroying floods, evidences of extreme water levels in mountains, and legends of ancient cataclysmic destruction of supposedly advanced technological oceanic cultures is obvious.)

Accordingly, use of huge scalar EM weapons is a double-edged sword. Unless carefully employed, use of the weapons could cause a terrible backlash to the user as well as the victim, and even accidentally cause the destruction of the earth itself. It is not accidental that in 1960 Khrushchev stated that his new fantastic weapon could -- if unrestrainedly used -- destroy all life on earth.

This appalling backlash potential is apparently what prompted Brezhnev in 1975 to make so strong an effort to get agreement to outlaw the development of "new weapons of mass destruction" more frightful than the mind of man had even dreamed of. Gromyko even introduced such a draft agreement into the proceedings of the United Nations. The first article of the draft agreement indicated that the nature of the weapons referred to would be negotiated. Sadly, the entire Western world did not even know what the Russians were talking about.

ROGERS' UNDERSEA AND UNDERGROUND COMMUNICATION SYSTEMS

SLIDE 25

- **SECRETLY USED BY U.S. IN WWI**
- **COMMUNICATED TO SUBS UNDERWATER**
 - ANY DEPTH, UP TO 30 KHZ
 - REDUCED DEPTH, >30 KHZ
- **COMMUNICATED TO EXPEDITIONARY HQ OVERSEAS**
 - 5,000 TIMES STRONGER THAN AERIAL
 - STATIC-FREE
- **DECLASSIFIED IN 1919**
 - TO REVOLUTIONIZE COMMUNICATIONS
 - TO END ALL SURFACE ANTENNAS
- **MYSTERIOUSLY "LOST"**
- **REDISCOVERED AND "LOST" THREE TIMES AFTER WWII**

In an article in the March 1919 issue of the Electrical Experimenter, a real bombshell was released on an unsuspecting world.

In that issue, details of the Rogers' undersea and underground communication systems were released. These systems had been classified SECRET during WWI, and used to communicate with (1) U.S. submarines underwater around the world, and (2) U.S. Expeditionary Forces Headquarters overseas.

Subs at any submerged depth could be reached with transmitters of frequencies up to 30 kiloHertz. At reduced depths, frequencies above 30 kHz could be used.

At the headquarters of U.S. overseas forces, the signals were received through the earth. They were 5,000 times stronger than aerial signals through the atmosphere, and static-free.

The Rogers' systems were covered by a series of patents. They used special antennas implanted in the ground.

While the patents are somewhat confused, several of the diagrams in the Electrical Experimenter reveal that the antennas were producing scalar waves. Scalar waves can indeed travel through the earth and through the ocean. Indeed, if good quality scalar waves are made, then frequencies well above 30 kHz can be sent through the ocean. Multi-megahertz frequencies, for example, are easily achievable. (The problem, of course, is that these waves are pure zero-vector artificial potentials that do not move electrons in the conduction gas of a conventional antenna/receiver combination. Normal receivers and detectors do not see them. Special underwater detectors -- such as those developed by Frank Golden -- are required.).

With the startling declassification and revelation of the Rogers' systems, it was expected that all communications would be revolutionized, and that all surface antennas would be removed.

Strangely, this entire technology faded away quickly, as if it had never been. Certain powerful interests did not wish the extended electromagnetics to be discovered or taught. That, after all, would lead to free energy and loss of economic control of the citizens. That was precisely why Nikola Tesla had already been suppressed.

According to the important research of Dr. Robert Beck, the same scalar technology has been rediscovered and mysteriously "lost" at least three times after World War III!

Today it is still being suppressed by the orthodox establishment.

One wonders why no orthodox physicist -- with the single exception of Dr. Hooper (see U.S. patents 3,610,971, Oct. 5, 1971 and 3,656,013, Apr. 11, 1972) -- seems to have experimented with deliberately constructed zero-vector EM waves and devices, and published his results in the literature.

One would think that any university physics department would wish to explore such a gaping void with at least a few graduate student experiments, if for no other reason than scientific curiosity, particularly when the experiment is easily performed, it is totally different from anything else in the theory or literature, and the implications may be formidable. A true scientist in that related field ought to try it!

HOW DOES THE ROGERS' SYSTEM WORK?

SLIDE 26

**"WE DO NOT KNOW AS YET HOW
THE ROGERS SYSTEM WORK.**

**... ROGERS HIMSELF TAKES THE
VIEW -- AND HE IS SECONDED
BY TESLA -- THAT THE
TRANSOCEANIC MESSAGES WHICH
HE RECEIVES ... ARE NOT HERTZIAN WAVES ... "**

**H. GERNSBACK
ELECTRICAL EXPERIMENTER
6(11), MARCH 1919, P.52**

In the same March 1919 issue of Electrical Experimenter, Hugo Gernsback pointed out that no one as yet knew how the Rogers'

system actually worked.

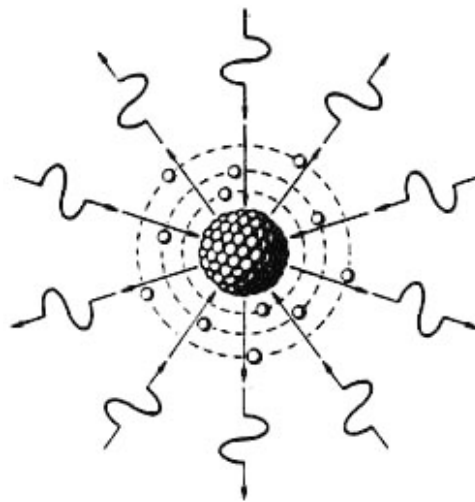
Rogers himself believed he was not using conventional Hertzian waves.

Nikola Tesla himself confirmed that the underground and undersea waves were not Hertzian waves.

If so, they could only have been scalar waves.

SCALAR EM WAVES ARE EMITTED AND ABSORBED BY THE NUCLEUS.

SLIDE 27



Normally scalar EM waves do not couple to orbital electrons. Entering into the atom, incoming scalar EM waves penetrate the electron shells without interaction. They continue, penetrating into the interior of the closely packed nucleus, where the extreme nonlinearity of the charged virtual particle flux that binds the nucleons together distorts the scalar wave, dephasing its summed EM vector components. This produces a nonzero EM resultant and polarized pattern directly inside the virtual particle charge flux of the nucleus.

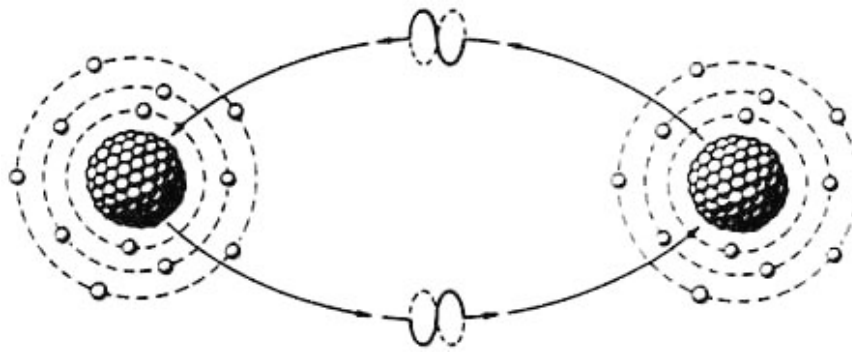
The new EM resultant immediately couples the distorted scalar wave to the nucleus, resulting in absorption of the wave and incorporation of its polarization pattern into the nucleus' virtual flux. This in turn results in a slightly excited nucleus. Normally the excited nucleus will promptly decay by emitting another scalar wave, which passes through the orbital electron shells and radiates out into the universe.

However, as can be seen, if the same strong scalar pattern is constantly radiated into the nucleus and absorbed by it, the excitation of the nucleus "charges up," leading to decay by other modes. In this manner the nucleus can be engineered -- even transmuted -- by rather minuscule power of the engineering radiation signal.

This is how living biological systems are able to transmute elements, as discovered by Louis Kervran. (Kervran was nominated for the 1977 Nobel Prize for this work.). The biosystem produces scalar EM waves. If the appropriate signal is employed into and on the appropriate nucleus, a changed element emerges. In this fashion chickens denied sufficient calcium in their diet, but allowed a surplus of potassium, are able to transmute some of the potassium into calcium. Note that one of the isotopes of potassium is an isomer of normal calcium. Transmutation of this potassium isomer to calcium is easiest.

NUCLEI OF THE UNIVERSE CONTINUALLY EXCHANGE SCALAR EM WAVES

SLIDE 28



Thus scalar EM waves are continually exchanged by all nuclei of the universe, and the vacuum is -- among other things -- a seething cauldron of scalar radiation.

In fact, it is this seething scalar wave cauldron that creates the virtual particles and the virtual particle flux of vacuum itself. (Since the scalar EM wave represents an oscillation of the curvature of spacetime, and since everything -- virtual or observable -- is a curvature of spacetime, then scalar waves can be taken as the universal generatrix.

The intensity of the trapped scalar flux in the nucleus of an atom is responsible for the mass and inertia of the nucleus.

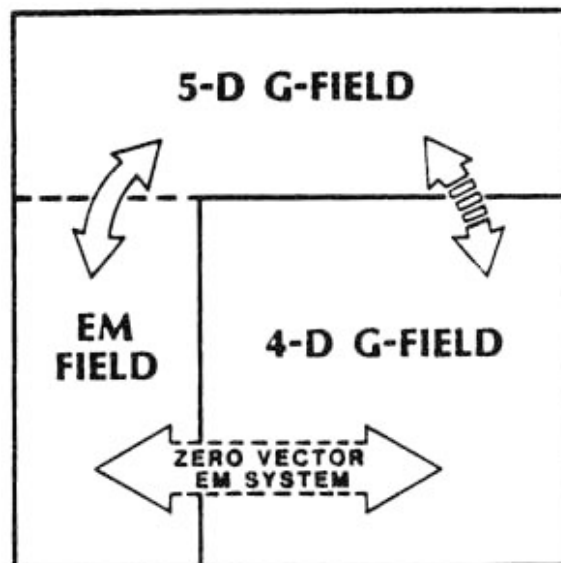
Mass is localized trapped scalar resonance.

The trapping agent is the spin of a particle.

The mass and inertia of the particle are due to the scalar resonance that is trapped. Increasing the amplitude of the trapped scalar resonance increases the mass and inertia; decreasing the amplitude decreases the mass and inertia.

CONVERTING EM FIELD ENERGY TO G-FIELD ENERGY AND VICE VERSA.

SLIDE 29



According to Kaluza theory, there are no such things as a separate EM field and a separate gravity field. Instead, in five dimensions there is only one field: the 5-d gravitational field.

The EM field is the 5th dimensional aspect, while our normal 4-dimensional G-field is the other aspect of the 5-field, in our normal 4-space.

Thus we may say that the 5-field is composed of two components: the 5th dimensional component (our normal EM field) and the component occupying our normal 4 dimensions (our normal G-field).

The 5-d "force" field, of course -- or the 5-space analogy to a force field -- would be due to a gradient or "bleed-off" of the 5-d

gravitational potential. This gradient in turn is composed of two components: the 5th dimensional "bleed-off" outside our normal 4-space (this outer bleed-off is our normal EM force field) and the bleed-off inside our normal 4-space (this inner bleed-off is our normal G-field).

Normally the 5-potential bleeds-off outside our 4-space as EM field, far greater than it bleeds-off inside our world as G-field. Between two electrons, for example, the electric field is about 10 to the 42 times as strong as the G-field. Since in the Kaluza view there is only one 5-d G-potential that is causing both force fields, this shows that there is an incredibly greater EM bleed-off of the 5-potential between the two electrons than there is a G-field bleed-off between them.

As shown on the diagram, the 5-d G-field is normally comprised almost entirely of the 5th dimensional EM field. Only a small 4-space G-field component exists.

However, suppose we were to "block" the bleed-off of the 5-potential in the EM mode. Then none of the 5-potential could bleed-off in the 5th dimensional EM field. Instead, it would be forced to bleed-off into the 4-space G-field. In our two electron example, this "perfect case" would result in the disappearance of the E-field between the two electrons, and the G-field between them would increase to about $10 \exp 42$ times its normal strength.

The end result would be that, by blocking the EM force field bleed-off, EM field is converted to G-field. In addition, EM field energy is converted to G-field energy. With the extremely amplified gravitational and inertial effects that result, one can now accomplish direct engineering of gravitation, mass, and inertial effects.

We can effectively accomplish this "blocking the EM bleed-off" by opposing EM force fields so that they sum to vector zero. This is the same as summing various 5th dimensional gradients of the 5-potential to a zero vector resultant. In that case, as much "EM bleed-back to 5-potential" occurs as there is "EM bleed-off from 5-potential."

This places the 5-potential in equilibrium with respect to EM bleed-off.

Also, another nice thing results: Since we can readily vary the magnitudes of the EM force field components of the vector zero summation, we can actually form phased "zero vector waves" by increasing and decreasing the magnitudes of all the component EM vectors in phase, but retaining their vector summation always equal to zero.

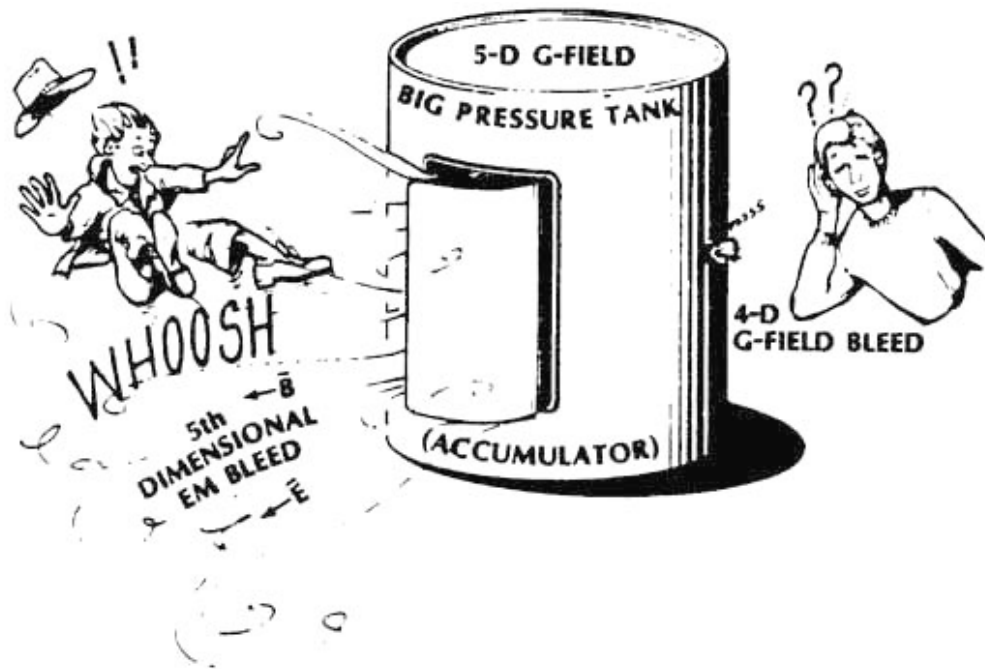
In that case we have produced a very simple 5-space G-potential wave, which concomitantly forces phase-locked variations in the 4-space G-potential. In short, we have produced an electrogravitational (EG) wave, or scalar EM wave for short. This wave described is the simplest EG scalar wave we can produce; much more complex EG waves can be produced and used for highly specialized purposes.

The scalar EG wave changes EG potential energy into 4-gravity potential energy in one half-cycle, and changes 4-G potential energy into EG potential energy in the other half-cycle. However, the EG potential energy in the first half-cycle does not react electromagnetically in linear circumstances, since it is electromagnetically a linear vector zero.

So our scalar EG wave actually oscillates energy back and forth between a locked-in 5th dimensional EM potential and a 4-space G-potential. As can be seen, to the linear 4-space observer this scalar EG wave appears as a purely gravitational wave, with G-potential magnitude varying in a wavelike manner.

NORMAL EM BLEEDS-OFF G-FIELD

SLIDE 30

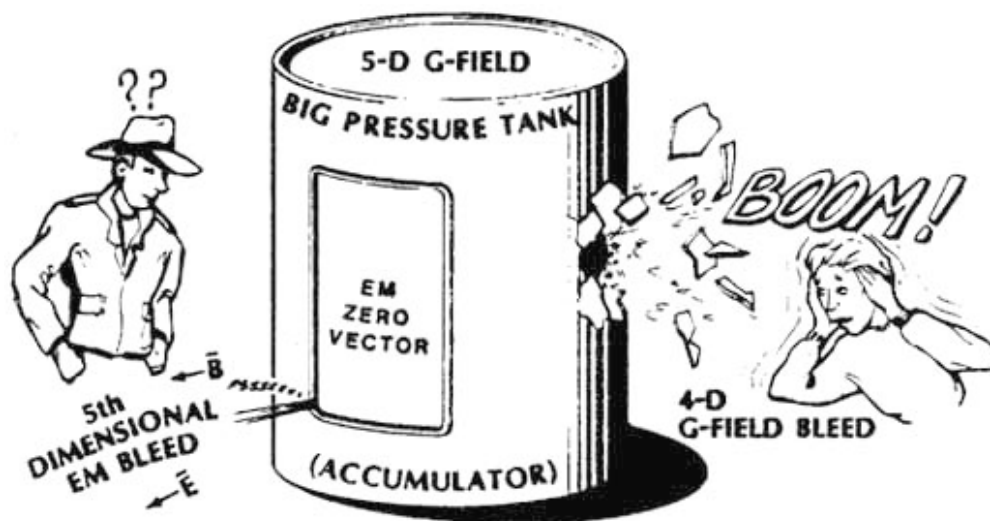


For easy visualization, we may regard the situation in the analogy shown on the slide.

The 5-potential of 5-space vacuum is like a high pressure in a big tank. The tank has a huge open door in the 5th dimension, leading to rapid bleed-off of the 5-pressure through the big door; that is, as EM field. Only a very small hole in the tank normally exists in our own 4-space world, so only a very small amount of the pressure bleeds off as our G-field.

SCALAR EM FORCES 4-D G-FIELD.

SLIDE 31.



As can be seen however, if we shut the big door so that we have only a little bleed-off through the seals, then most of the pressure is forced to bleed-off through the small opening, greatly enlarging it. In that case, most of the 5-potential bleeds-off as 4-G force field.

The mass exposed to such increased 4-G bleed-off exhibits a much greater mass and inertia.

In fact, mass itself can act as an accumulator for the effect, and it can increase its ability to store trapped scalar resonance. This increases its inertia.

By the use of scalar EM (blocking the EM bleed-off), we can input normal EM energy and obtain powerful gravitational and inertial effects. Many other powerful effects can also be obtained.

DETECTION IN ELECTROGRAVITATION

SLIDE 32

- **WHEN ORDINARY EM FORCE FIELDS ARE INTERFERED/SUMMED TO PRODUCE ZERO, THEY PRODUCE STRESS OF VACUUM (GRAVITATIONAL POTENTIAL OR FIELD). THIS IS ELECTRO-GRAVITY.**
-
- **WHEN ELECTRO-GRAVITATIONAL FIELDS ARE INTERFERED/SUMMED TO PRODUCE ZERO. THEY PRODUCE ORDINARY ELECTRO-MAGNETIC FORCE**

Here are two magic rules in the scalar electrogravitational business:

(1) When ordinary EM force fields are interfered or summed so that they produce vector zero, they produce stress of vacuum (5-potential). One component of this 5-potential is the 4-space G-potential. Since bleed-off as a gradient of this 4-space G-potential is all that is allowed, then the EM destructive interference/zero summation bleeds-off to produce gravitational force field.

In short, destructive interference of EM waves or force fields produces gravitational force field on detecting/coupled particles.

(2) When electrogravitational fields are interfered/summed to produce vector zero, this destructive interference/zero summation bleeds-off to produce ordinary electromagnetic force field.

In short, destructive interference of scalar EM waves or fields (electrogravitational waves or fields) produces electromagnetic force fields on detecting/coupled particles.

BACKGROUND FOR THE BRIEFER:

Mathematically we can summarize this as follows;

$$G_{(1-4)} = G_{(1-4)}(m) + G_{(1-4)}(EM) \quad [3]$$

$$G_{(1-5)} = G_5 + G_{(1-4)} \quad [4]$$

$$\text{If } \mathbf{E} = \hat{\mathbf{a}}_i \mathbf{E}_i = \mathbf{0}, \mathbf{E}_i^1 \mathbf{0}, \mathbf{B} = \hat{\mathbf{a}}_i \mathbf{B}_i = \mathbf{0}, \mathbf{B}_i^1 \mathbf{0}, \quad [5]$$

$$\text{then } G_{(1-4)}(m) = G_{(1-4)}(EM) = G_5 = G_{(1-5)} \quad [6]$$

$$\text{and } G_5 = G_{(1-4)} = f(\hat{\mathbf{a}}_i |\mathbf{E}_i|^2) + g(\hat{\mathbf{a}}_i |\mathbf{B}_i|^2) \quad [7]$$

$$\text{and } G_{(1-5)} = G_5 = G_{(1-4)}(m) = G_{(1-4)}(EM) = f(f) + g(\mathbf{A}) \quad [8]$$

Where

$G_{(1-5)}$ is the 5-d G potential, or total G-stress on dimensions 1 - 5.

G_5 is the combined EM potential, or G-stress on dimension 5 only.

$G_{(1-4)}(m)$ is the normal 4-d G-potential of mass alone, or the G-stress due to mass-gravity.

$G_{(1-4)}(EM)$ is any extra 4-d G-potential of mass due to conversion from G_5 stress (normally zero).

$\mathbf{E}$ and $\mathbf{B}$ are the electric and magnetic force fields.

ϕ is the electrostatic scalar potential.

$\mathbf{A}$ is the magnetic vector potential.

Thus the age-old scientific dream of direct engineering of gravitational field -- and of spacetime itself -- can now become reality. To start, one simply makes an EM vector zero and varies its stress intensity and internal pattern of summed components. One also varies the reference potential at which the patterned EM stress zero is created, and the frequency of internal component variation.

BACKGROUND FOR THE BRIEFER.

He that has ears, let him hear.

Here is the secret of antigravity

The "electrical charge" of a charged particle -- such as one of the orbital electrons of an atom or one of the protons of its nucleus -- represents a difference in flux intensity (potential) between the local particle and its ambient vacuum.

It's the continual bleed-off of gravitational charge as electrical charge.

If that bleed-off is reversed or stopped, a drastic effect on the gravitational potential and charge ensues. The 5-potential and 5-charge have become 4-G-potential and 4-d-charge respectively.

Thus "charging" an object with its scalar EM pattern charges it gravitationally.

Now the only "bleed-off channel" is through the 4-G force field.

Further, in a nucleus the nucleons continually change back and forth between proton and neutron, so the electrical charge is "spread" throughout the nucleus and shared by all the nucleons.

Further, each element (actually each isotope) has its own unique "ensemble pattern" of Fourier expansion scalar frequencies, amplitudes, etc. This pattern, of course, can be reproduced artificially and transmitted by modified EM transmitters (i.e., by scalar EM transmitters). There is, however, a sort of "master key" scalar EM (EG) pattern for nucleons (protons and neutrons which are changing back and forth into each other by exchange of virtual charge currents).

If one "reverses the charge" by inverting this pattern, and then "charges up a mass with the inverted charge," to the external observer the charging mass just gets lighter and lighter, and its inertia gets less and less. Eventually it seems (to him) to acquire negative mass and negative inertia, and just accelerate away from the earth. The object "falls upward" instead of "falling downwards."

There are also some weird time effects; that object can be moving slower through time than the laboratory observer, or even be moving backwards through time with respect to the laboratory observer. (Don't believe everything they taught you in relativity; none of those cats had ever engineered a single general relativistic situation. Nothing they teach in GR is based on direct experiment. Most of what they teach is already experimentally proven to be in error.)

But back to our slide.

Inside the pattern itself, it's just a quite normal pattern. No change in or on the object seems to have occurred, to it, if the charge is evenly accomplished throughout the object. Indeed, to an internal observer it's the external environment which seems to have suddenly gotten very strange! This is what occasionally happens to a hapless aircraft or ship that experiences anomalous spatiotemporal difficulty in an occasionally scalar-active area such as the Bermuda triangle. Under the right conditions, the vehicle's gravitational charge is affected by anomalous changes in the scalar radiation from the earth in that area. To the passengers and crew, it is the external environment which suddenly seems weird. In addition, on-board EM and inertial instruments may be affected, and other electrogravitational effects may also occur, due to differing rates of charge in different parts of the vehicle.).

"Reversing or lowering the EG-charge" is controlled by means of biasing the ground potential on the ensemble pattern transmitters. These transmitters can even be on-board the vehicle itself. (Remember, in scalar EM to transmit is also to receive. A vehicle can change its own bias potential (with respect to local vacuum G-potential) by properly transmitting, which translates to "receiving potential charge." The charge current can either be negative or positive (its potential can be lowered or increased vis-a-vis that of the vacuum.)

By fiddling "with this, you can float metal. Or a human body. Or a battleship. Or a high-speed vehicle containing a crew.

You can even "dematerialize it" or "teleport it."

The [Philadelphia Experiment](#) may have been real after all. If so, the test ship and its personnel were "blasted" into this strange realm, instead of making a gentle, controlled entry

Suppose you materially lower or reverse (adjust) the gravitational charge (gravitation 5-potential with zero-summed EM to throttle EM bleed-off). At zero gravitational charge, to the external observer, such an assumed vehicle would seem to have no mass and no inertia. It is capable of extreme accelerations, right angle turns at full speed, etc. It is also right on the point of dematerialization, and appears to be a vehicle of light.

If the pilot wishes to "land," of course he must adjust the charge on the vehicle.

If the pilot wishes to "dematerialize" or "teleport," again he must adjust the charge on the vehicle.

If he wishes to go "hyperspatial," again he must adjust the charge on the vehicle and allow the proper bleed-off to produce a hyperspatial force. That's done with nested zero summations and nested patterns of scalar EM transmission.

That is, he can charge and bias the vehicle in multiple, nested zero-summations simultaneously.

That is necessary for hyperspatial control and travel.

Note that in lower hyperspace the vehicle can do some very strange things. Such as "penetrate" solid matter (actually, it goes "around" the 3-space matter in a 4th Kaluza-Klein space).

We might expect to see such vehicles glowing. Their various surface features and mechanisms might appear to be glowing or revolving lights, etc.

They could exhibit incredible "aerodynamic performance," seemingly in the atmosphere. Actually they would not be moving "through" the atmosphere at all, but through a higher space outside each particle of atmosphere.

They could seem to materialize and dematerialize.

They could seem to plunge into the ocean or rise out of it.

They could even seem to operate under the ocean or inside the earth itself.

Such anomalous vehicle performances have been seen all over the world, particularly since a few years after WWII.

Control Group Interference

It appears that one or more nations of Earth are operating such vehicles now in great secrecy. Our own "government" may even be one of these.

If so, it isn't our true "government/government." Instead, it's the "control group/government." It's government at the operational level, but at higher level it belongs to certain control groups who have penetrated our government's vitals and taken over all such projects.

Electrogravitation seems to have been started time and time again in the U.S. government. Each time, it seems to have either been violently squelched or subverted to mysterious control by sources inside the government which are not actually government.

In any such "subverted" project, the individuals involved in the operations are truly government employees who fully believe their highly classified project is controlled by the U.S. government. They think the higher government officials with need-to-know are fully cognizant of the project.

Actually that assumption will be false. At the top of the project, the project does not report to the U.S. government. It reports to control group representatives. Utmost secrecy classification is used as a cloak to disguise the project even from higher U.S. government officials who are in the direct chain and possess the appropriate certified clearances and need-to-know.

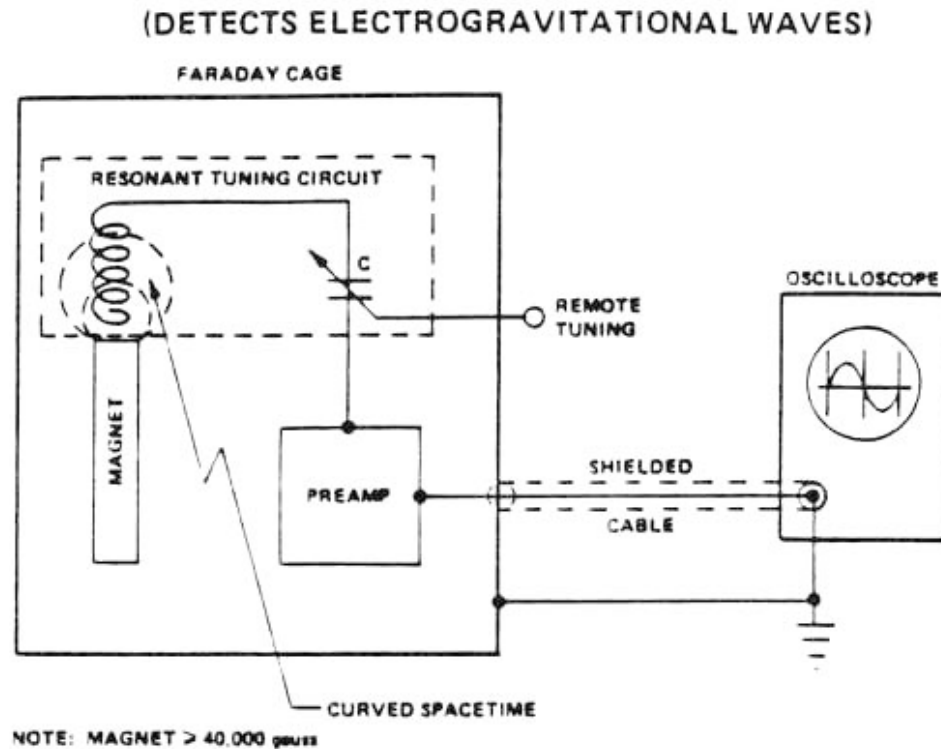
Thus one has to be careful when he asks, "Doesn't our own government have such things?" The answer is both yes and no.

Our legitimate government/government is not allowed to have these vehicles, or know of them.

Our illegitimate control group/government may well have had them for some time.

SCALAR WAVE DETECTOR

SLIDE 33



*BEDINI VERSION OF DEA/FARETTO DETECTOR

On this slide we show a concept for a detector for scalar EG waves. This is the Bedini scalar wave detector, adapted from an original concept by Dea and Faretto.

The idea is quite simple: install a very powerful bar magnet vertically inside a grounded Faraday cage. Then install an open-ended coil longitudinally above the magnet so that a line through the longitudinal axis of the magnet passes through the longitudinal axis of the coil above it. The open end of the coil does not touch the magnet.

Connect the other end of the coil to a variable tuning capacitor, so that the coil and capacitor form a tunable, series-LC-oscillatory circuit. The output of the capacitor is connected to a transistorized preamplifier inside the cage. A tuning shaft for the capacitor is very carefully passed through a small hole in the shield to allow tuning from outside.

The output of the preamp passes very carefully through a small hole in the shield, through a shielded cable, to an adjacent oscilloscope. The cable shield is also grounded to reference ground potential.

The theory is as follows: Suppose a normal EM wave appears inside the cage, above the magnet or closely adjacent thereto. In that case a coupled oscillation appears in the field of the magnet, and this oscillation is coupled to the coil immediately above it. If the oscillation is within the bandwidth of the tuned series LC circuit, detection occurs. This is amplified by the preamp and passed to the oscilloscope, where it is displayed on the scope.

Note that the detector detects normal EM wave. Now our problem is: how do we get an EG wave to be detected? And how do we assure that we do not detect ordinary EM waves from outside?

Actually this is simple. Ordinary waves (except for quite low frequency) will be grounded out by the Faraday shield, and will not penetrate the cage. Thus these normal EM waves cannot enter the cage and appear above the magnet. They will not be detected.

Scalar EG waves, on the other hand, will enter the cage since they do not couple to conduction electrons in the metal of the cage. Above the pole of the magnet, spacetime is locally bent. After all, a pole is a magnetostatic scalar potential, which is a part of the conglomerate called "G-potential." The pole represents an increase (or decrease, depending upon whether it is a north or a south pole) in the magnetostatic component of the local G-potential. This is a curvature of spacetime. An EG wave entering this region adds a varying component of magnetostatic G-potential, which bleeds-off in the coil as an ordinary EM wave.

Another way to view the detector is to model the EG wave as a longitudinal wave, and an ordinary EM wave as a transverse wave. When the EG wave enters the curved spacetime region above the magnet, to the coil (the "observer" in this case!) the longitudinal aspect of the EG wave appears to be rotating back and forth, so that an oscillating transverse component is present. This transverse component appears to the coil as an ordinary EM field, and so the LC circuit detects it if it is in the proper frequency band.

Yet another way to view the situation is to realize that an EG wave entering the magnet results in an oscillation component added to

the magnetostatic scalar potential (pole strength) of the magnet. According^{1y}, the magnet is a receiver for scalar waves, which are detected to "bleed-off" as an oscillation of the magnetic field strength of the magnet. Coupling of this oscillating magnetic field to the coil creates an oscillating current flow into the capacitor. This oscillates the voltage input to the preamp, which amplifies and feeds the signal to the oscilloscope for display.

In fact I rather like the latter view! It is important to remember that a magnetostatic potential and an electrostatic potential can be oscillated by a scalar EG wave. By placing a magnetic material inside a Faraday cage, the oscillation of the magnetostatic scalar potential (pole strength of the magnet) can be used as the EG detecting mechanism. By placing a chargeable material inside a Faraday cage, the oscillation of the electrostatic scalar potential can be detected. (Possible examples of the latter type detectors are given by Hodowanec, Radio Electronics, April 1986.)

Note also that one may detect waves at one reference level and not at another. Changing the bias on the zero-reference ground of the Bedini detector affects the detection. To look inside a normal EM carrier (such as the Woodpecker) and see what scalar signals are riding upon it, the carrier may be used to bias the reference ground of the Bedini detector.

To produce a spectrum analyzer, simply use additional series resonant LC tuning circuits in parallel (put multiple taps on the coil, and wire each tap to a separate tuning capacitor of different capacitance). Again, varying the zero reference level is important, as is varying the strength of the magnet.

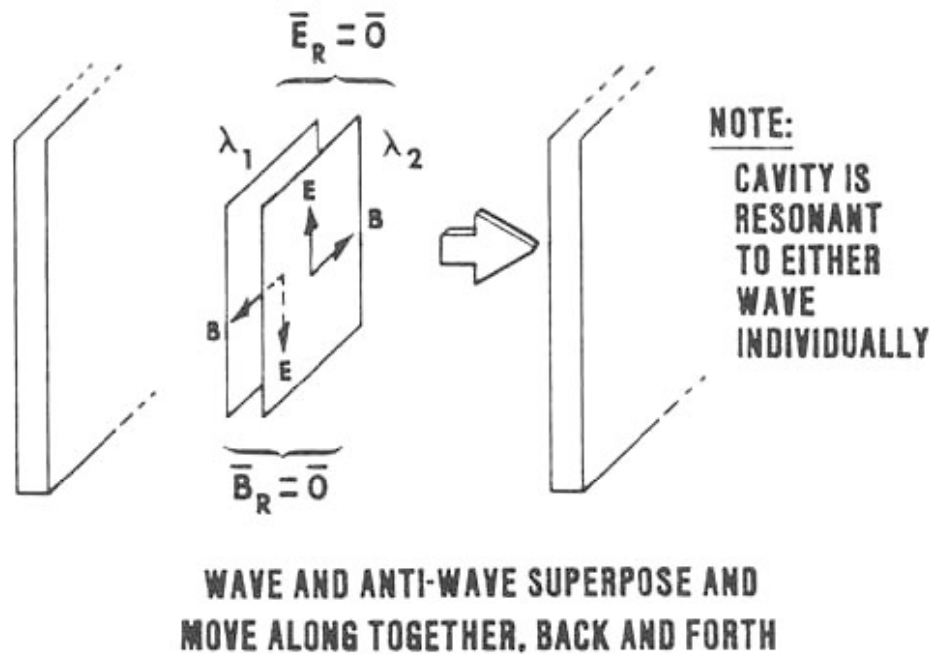
Golden also has invented an excellent series of scalar wave detectors based upon quite different proprietary principles.

The bottom line is: we can indeed rigorously detect and measure scalar EG waves. When one considers the large sums of money presently being spent to bury large aluminum cylinders etc. in an attempt to detect gravitational waves, one wonders why some funds could not be released to a few unorthodox researchers by the National Academy of Sciences to fund the proven creation and detection of electrogravitational waves!

Note from Webmaster: I understand that it took Bedini about 600 attempts before he got the device to work. It was then handed over to a different party to produce it, who then made some "improvements", and the device then failed to work.

SCALAR RESONANCE

SLIDE 34



Here we explain a new kind of resonance: scalar EH resonance, or electrogravitational resonance.

First, imagine we have a standard resonant cavity, represented by the two walls in our diagram. In this cavity we have a resonant EM wave moving back and forth, represented by the forward-most plane. In accordance with convention, we show the E-field vector and the B-field vector at right angles in this moving wave front. As the wave front moves back and forth, the vectors vary back and forth; however, at any one point between the walls, the two vectors always have the same value. Thus our resonant EM wave forms a standing wave in the cavity.

Now imagine that a second wave front, precisely like the first and of the same frequency, is superposed over the first wave front and travels along with it. This second wave -- the "antiwave" -- has its force vectors 180 degrees out of phase with the force vectors of

the reference wave. Hence the E-fields and B-fields of the two superposed waves always sum to vector zeros, anywhere in the cavity. To an external observer, the cavity contains no ordinary electromagnetic force fields, hence no ordinary EM energy.

However, the energy density of a single EM sine wave in vacuum is given by

$$[E^2+B^2]/8\pi \quad [9]$$

This energy density is always positive. Hence the energy density of the two waves at any point x between the walls is equal to

$$[E^2+B^2]/4\pi \quad [10]$$

where

$$E = E(x) ; B = B(x) \quad [11]$$

Thus the energy density of vacuum varies with x. But, rigorously, since the resultant E and B fields are zero, this describes a standing gravitational wave. Hence we have a standing EG wave, existing in the resonant cavity. This is an example of scalar resonance. Rigorously the cavity has mass and inertia, to an outside observer, as a result of the two warps in spacetime it contains.

Note that in one half-cycle the energy density of vacuum is greater than ambient, and in the other half-cycle it is less. In the region of one half-cycle, time flows at a faster rate than to the ambient observer, and in the other half-cycle time flows at a slower rate than to the ambient observer.

One half-cycle appears to contain negative electrical charge, and the other appears to contain positive charge.

One half-cycle appears to contain a north pole (positive magnetostatic scalar potential), and the other half-cycle appears to contain a south pole (negative magnetostatic scalar potential).

Perhaps now one can begin to understand why a continuously accelerated orbital electron in the atom does not radiate EM energy, completely in violation of Maxwell's equations. The electron is naught but a complex aspect of a standing scalar resonance, existing between the nucleus and the orbit.

SCALAR RESONANCE CHARACTERISTICS

SLIDE 35.

- NOT IN PRESENT TEXTBOOKS
- CONTROLS NATURE OF PARTICLE
- BENDS SPACETIME
- CONTROLS MASS
- CONTROLS INERTIA
- CONTROLS GRAVITY
- CAN FLOW
- A "MASS" IS LIKE A CAPACITANCE
- HAS A SCALAR MAGNITUDE
- HAS SPECIFIC PATTERNING

- NOT IN PRESENT TEXTBOOKS
- CONTROLS NATURE OF PARTICLE
- BENDS SPACETIME
- CONTROLS MASS
- CONTROLS INERTIA
- CONTROLS GRAVITY
- CAN FLOW
- A "MASS" IS LIKE A CAPACITANCE
- HAS A SCALAR MAGNITUDE
- HAS SPECIFIC PATTERNING

Scalar resonance is not in the conventional textbook.

Scalar resonance is a particular zero-summed multi-resonance, electromagnetically, so that it does not act in an electromagnetic manner.

A scalar resonance is a standing electrogravitational wave. It can be made electrically, but it is not electrical in behavior.

In any scalar resonance, spacetime is curved, and it is the magnitude (and direction) of this spacetime curvature that is oscillating in "standing wave" fashion.

In respect to stress of the vacuum medium, one half of a standing sine wave of scalar resonance is tensile; the other half is compressive. However, this is with respect to the local ambient stress of vacuum.

"Mass" of a particle is just a characteristic exhibited by a trapped scalar resonance. Usually this trapping is done by the "spin" of the individual particle.

The concept of "mass" may be compared to the concept of "capacitance." That is, a mass is an accumulator for scalar waves; that is, for scalar resonances. It is continually being "charged" and "discharged" by absorption and emission of scalar waves from and to the ambient vacuum scalar wave flux.

Indeed, the magnitude of a mass may be defined in terms of the absolute value of this "switching" (absorption = switch in;

emission = switch out) rate. In a very early paper I defined the mass of an object as proportional to the absolute value of the sum of the input and output switching rates, where each "switch" represents a change of action of $h/(4\pi)$. (Bearden, Quiton/Perceptron Physics: A Theory of Existence, Perception, and Physical Phenomena, Mar. 1973, AD 763210, available through NTIS.) In that scheme, one kilogram of mass equals a switch rate of 17.053×10^{50} switches per second. An object is in a Lorentz frame when the switch-in and switch-out rates are equal in a given direction. If, in addition, the in-out rates in all directions are constant, the object is "stationary" with respect to a Lorentz observer. If not constant in all directions, the object is in a curved spacetime with respect to a Lorentz observer. In that case either the object's local spacetime is warped or the object is in a generalized, accelerated frame.

In the normal linear spacetime, the "charging" and "discharging" are equal in all directions; hence the "mass" exhibited in any direction is the same.

With respect to an "external observer's" equilibrium flux, a moving object encounters an increased amount of flux rate along its line of motion, just as a moving object in a rainstorm encounters more raindrops per second in the direction of its path, than does a stationary object. Encountering increased scalar wave flux (with respect to the external observer) forces the moving object to absorb and emit scalar waves at a higher rate along its direction of motion than when it is not moving. Thus to the external observer, the mass of the object has increased, insofar as any disturbing force along its line of motion is concerned.

At right angles to its line of motion, however, the flux rate is precisely the same as when the object is at rest. Therefore the "mass" of the moving object with respect to any disturbing force at right angles to its line of motion has not changed, as seen by the external Lorentz observer.

Thus is explained both parts of one of the alltime great mysteries of special relativity: (1) how the mass of an object increases with respect to its motion, and (2) why the mass only increases with respect to its line of motion, and not at right angles to it.

The inertia of a particle is due to its mass, i.e., to the total magnitude of its trapped scalar resonance.

The gravitational attraction between two masses is due to their spacetime curvature. Further, mass is like a capacitance. It can trap additional scalar waves as trapped resonance; hence increase its magnitude or "inertial charge." Or, it can discharge more scalar waves than it absorbs; hence decrease its magnitude or "inertial charge."

Those scalar waves emitted from resonance are emitted as a pattern ensemble of the resonance. Hence they may be regarded as constituting a current of scalar resonance leaving the mass-accumulator-object. Scalar waves absorbed into trapped resonance may be regarded as constituting a current of scalar resonance into the mass-accumulator-object. Thus it is proper to speak of scalar resonance as being able to "flow."

Further, it is possible to increase the mass of an object directly, by transmitting scalar EM waves to it so that it absorbs them. (By "absorbing" scalar waves one means that more enter the object than leave it, so the object acts as an inertial accumulator charging up with inertial charge. This is done by insuring that the reference potential of the scalar wave transmitter is higher than the reference potential of the irradiated object.)

It is also possible to decrease the mass of an object directly, by transmitting scalar EM waves to it so that it emits more than it absorbs. (By "emitting" scalar waves one means that more leave the object than enter it, so the object acts as if it were an inertial accumulator that is discharging its inertial charge. This is done by insuring that the reference potential of the scalar wave transmitter is lower than the reference potential of the irradiated object.)

As can be seen, the scalar wave "transmitter" is actually somewhat comparable to a heat pump; it can either act as an "energy transmitter" or as an "energy extractor," depending upon the difference in potential between "transmitter" and "receiver."

Finally, scalar resonance can have a specific pattern: both in frequency and in spatial curvature aspects, as well as "rate of flow of time" aspects. Indeed, scalar-wise every object has its individual "scalar pattern" which is a unique fingerprint. Since that print is spatiotemporal, it is a product of the object's entire past history. Thus -- scalar-wise -- no two objects are identical.

This brings up another rather amazing potential: If a reasonably precise scalar pattern of an object can be "irradiated" and resonated with scalar waves, energy may be created in or extracted from the distant object, just as stimulating one tuning fork can excite another at a distance by sympathetic resonance. We leave it as an exercise for the reader to ascertain the relevance of this statement to clairvoyance, radionics, remote viewing, etc.

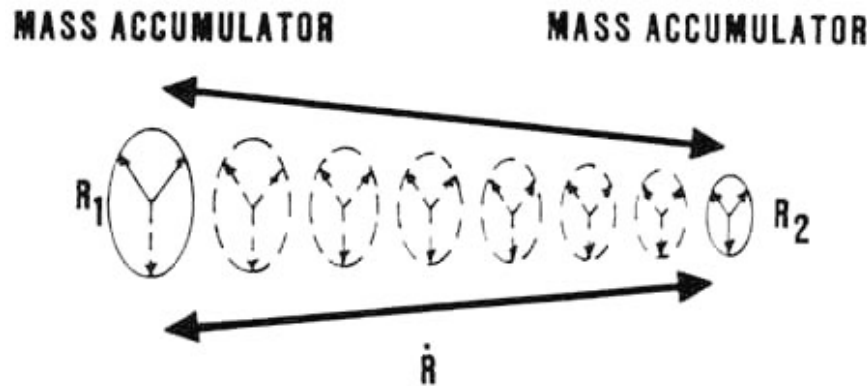
For the skeptic, however, we must point out that -- rigorously -- quantum mechanics requires that, continually, in any localized region of spacetime, the "pattern" of any object in the universe appears momentarily in the virtual state, purely from statistical considerations alone. So long as the situation remains statistical, any place in the universe can continue to have the "ghosts" of everything present there, in an ethereally thin pattern, and the observable world will not be affected by it. However, if one can discriminate and scalarly "charge" or "discharge" individual patterns in this "ghost-realm," action-at-a-distance is directly possible, as is materialization and dematerialization. If one accepts that even thought itself produces such virtual "ghost-patterns" in the virtual particle flux of vacuum, then it is at least theoretically possible to even materialize thoughts and thought images.

We have entered a new kind of reality where the old rules and the old limitations do not necessarily apply.

SCALAR RESONANCE CURRENTS

SLIDE 36

CURRENTS OF SCALAR RESONANCE CAN
FLOW TO CHARGE A MASS WITH ADDITIONAL
"MASS" AND "INERTIA", OR TO DISCHARGE IT.



As we pointed out, we can often greatly simplify matters by considering currents of scalar resonance. These currents flow from higher potential to lower potential, regardless of whether we are considering "transmission" or "reception."

Indeed, to "transmit at lower potential" is to receive, and to "receive at higher potential" is to transmit.

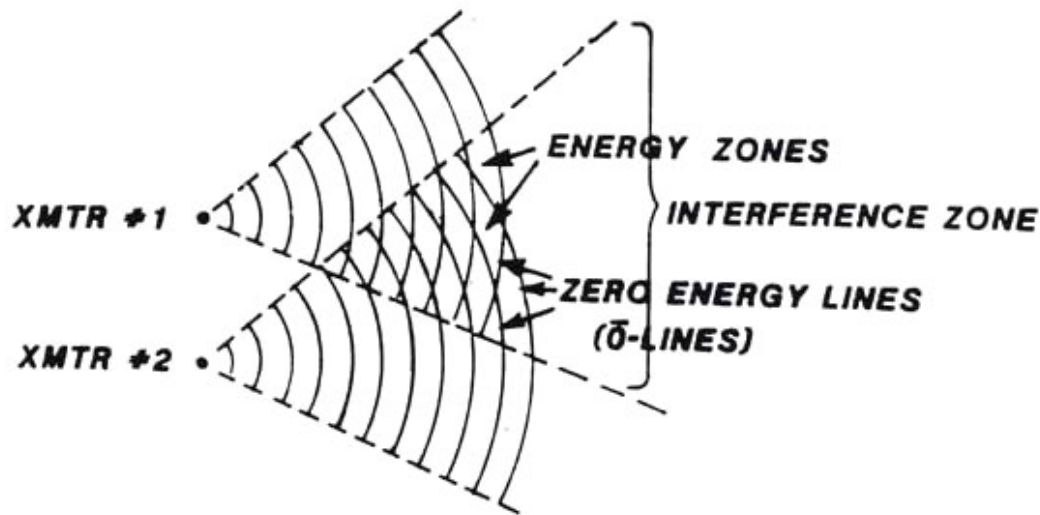
Thus the "transmitter-receiver" is a special system where simply biasing the two nodes differently determines which way the scalar resonance current will flow.

We may increase or decrease an object's inertia and mass, simply by properly biasing the transmitter-receiver system's two nodes.

In one accidental experiment of some hours in duration, Golden charged up an area so that, locally, all clocks became erratic. This included electrical clocks, battery-driven watches, wind-up kitchen clocks, and a pendulum-operated grandfather's clock. The rate of flow of time itself was apparently altered in the local area by the accumulated charge, which took some four days to drain off and discharge. At the end of the four days of discharge, all clocks and watches had returned to normal.

TRANSVERSE WAVE INTERFERENCE

SLIDE 37



On this slide we show the orthodox representation of EM wave interference.

The chart is stylized since we assume two single-frequency EM waves which intersect and interfere in the indicated region.

In the interference zone, in-phase wave amplitudes add (constructive interference) while out-of-phase wave amplitudes subtract (destructive interference). In our stylized mode, we show the zero-summed locations as lines.

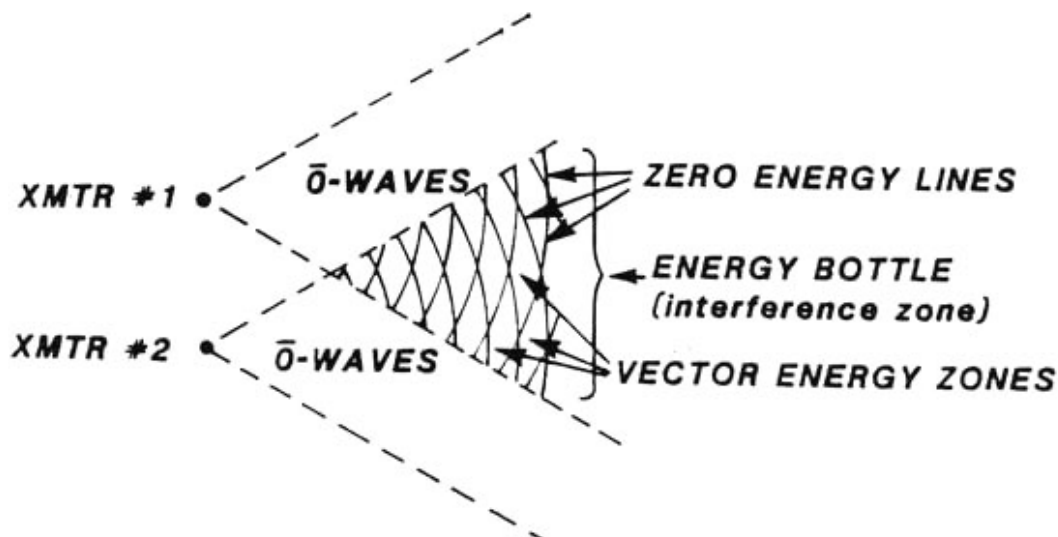
Conventionally, these interfering waves are considered to be transverse waves in vacuum.

The point is, in this scheme we think of "putting in the waves of finite amplitude, and creating the zero-amplitude regions by destructive interference." We create additional waves of increased-amplitude regions by constructive interference.

Note that this view is only half correct. It addresses the electromagnetics, but not the gravitational aspects. Actually the regions of destructive EM interference are regions of constructive G-interference, and the regions of constructive EM interference are regions of destructive G-interference.

LONGITUDINAL WAVE INTERFERENCE (SCALAR WAVES)

SLIDE 38



Here we show the same interference situation, only now we think of transmitting scalar EM waves, which we model as

longitudinal waves.

Again we assume two single-frequency scalar EM waves which intersect and interfere in the indicated region.

However, to an external observer, each of these waves individually appears to have zero E and H fields, hence to contain zero EM energy. That is, conventionally we seem to be transmitting waves of "pure potential," without any "force field" amplitudes whatsoever. We say we are transmitting waves of "artificial potential," since we deliberately constructed the zero-vector-summation scalar waves in the first place.

In the interference zone, a strange thing now happens. The relative magnitudes of the artificial potential of one wave with respect to the artificial potential of the other depends upon the phase relationship between the two. Further, whether the "gradient" so established appears negative or positive also depends upon the phase relationship between the two.

What results is most interesting: the out-of-phase condition now produces an EM gradient whose sign and magnitude are functions of the location within the interference zone.

Thus one now has real, non-zero EM potential gradients, both electrical and magnetic. And so real EM energy has emerged in an interference pattern within the area.

Ironically, we get essentially what we had before! Only now we have "put in the zero-reference lines, and produced the non-zero gradient (energy) zones."

In other words, we have recreated ordinary EM energy at a distance, directly from the interference of gravitational potential energy (anenergy).

And, to the laboratory observer, there has been no "EM wave" energy flow through the intervening space.

This was Tesla's secret of "wireless transmission of energy to a distance without losses."

Further, in a hypothetically perfect case, the interference represents a sort of "energy bottle."

But now recall our need to take the sign of the scalar current into account. In this energy bottle, then, EM energy emerges and stabilizes -- if and only if our transmitters are at higher reference potential than the ambient interference zone. If our transmitters are biased at lower potential, then energy is extracted from the energy bottle and re-emerges back at the transmitters, where it must be extracted and disposed of, if the transmitters are not to be burned out.

BACKGROUND FOR THE BRIEFER:

If we interfere two transmitters in a region of great energy -such as the molten core of the earth itself -- and bias the transmitters negatively, we can extract enormous energy directly from that distant source!

Indeed, a slight variation of this effect is precisely how the Soviet Union obtains the enormous energy with which to power its incredibly powerful strategic "continent-buster" scalar EM weapons. Scalar frequency pairs -- 12 kiloHertz apart -- are transmitted into the earth itself on some portion of the earth's "giant scalar resonance" frequency curve. Biasing the two transmitters differently with respect to each other produces a high potential difference (voltage) between them. At the same time, biasing them both negative with respect to the earth's molten core produces a scalar resonance current from the core to the two transmitters. In the "outer loop" between the two scalar transmitters, there appears a gigantic voltage and gigantic electrical current which can be captured by appropriate means. This electrical power is tapped off and transmitted to incredibly powerful scalar EM weapon systems. There special accumulators and switchers are utilized to provide the power of many Niagaras to each weapon.

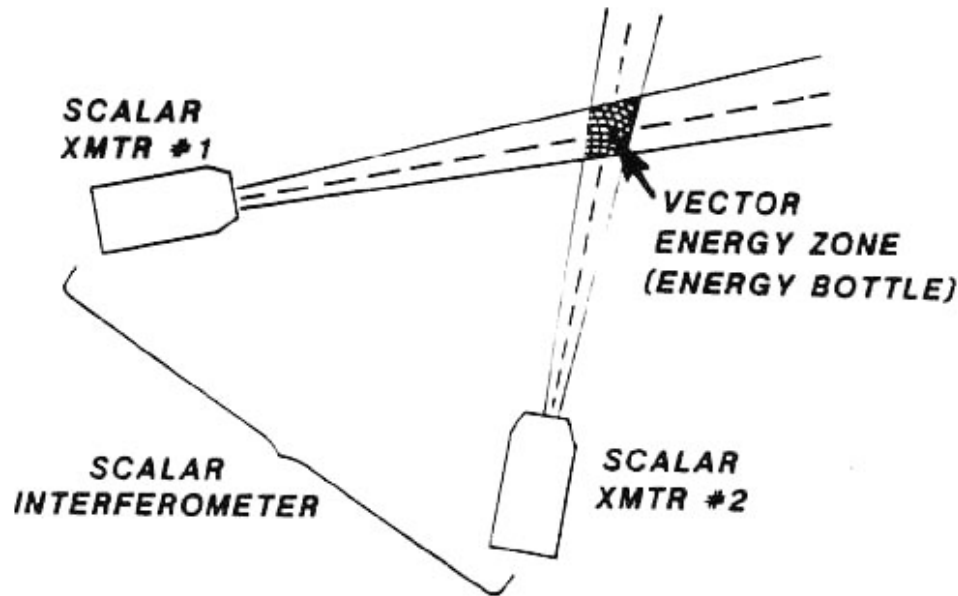
Just before May 1, 1985 the Soviet Union performed a "full-up" operational test of their entire strategic scalar EM weapons complex. This test was detected and monitored periodically by Frank Golden. Some 27 of these giant Soviet "power taps" were locked into the molten core of the earth, producing forced (entrained) scalar resonance of the entire planet on 54 controlled frequencies under our very feet. The remainder of the scalar frequency spectrum was ablaze with literally hundreds of Soviet scalar transmitters: probably the entire strategic scalar command and control system to underwater submarines, higher command centers, distant commands, etc. was activated in the giant exercise.

For several days, the system was exercised on a mind-boggling scale, apparently as part of the Soviet Union's highly accentuated 40th anniversary celebration of the end of World War II.

Ironically, not a single U.S. intelligence agency, laboratory, or scientist detected this monstrous exercise for the new Soviet leader, Gorbachev. Not a one of them had a detector for scalar EM radiation, and not a one of them officially believes the exercise ever happened.

CREATING ENERGY AT A DISTANCE

SLIDE 39



A most useful device is obtained if one uses a scalar interferometer where the two transmitters transmit beams which intersect at a distance.

In the interference zone, an energy bottle is created.

By biasing the transmitter reference potentials well above that of the distant energy bottle, EM energy emerges in that zone. In that case the interferometer is operating in the exothermic mode.

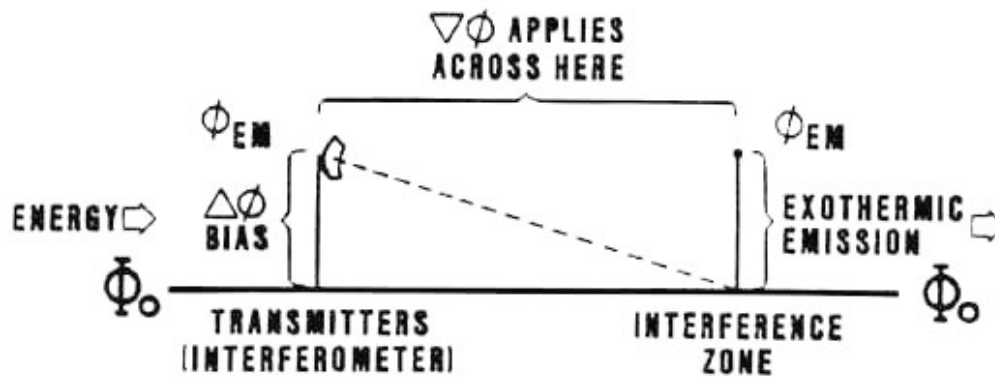
By biasing the transmitter reference potentials well below that of the distant energy bottle, EM energy is extracted from the distant zone and emerges from the transmitter. In that case the interferometer is operating in the endothermic mode.

If the transmitters transmit continuously, the effect in the distant zone is continuous.

If each transmitter transmits a pulse, and the two pulses meet in the distant intersection zone, then an explosive emergence or extraction of energy occurs at the distant interference zone, depending upon whether the interferometer is operating in the exothermic or the endothermic mode.

EXOTHERMIC MODE (SCALAR INTERFEROMETER)

SLIDE 40



For a scalar interferometer, "del phi" (the gradient of the potential) applies between the transmitter site and the distant intersection site, not to the intervening space in between. Thus one speaks of "energy flow" as being between transmitter and intersection, without any "in between." In the intervening space, all the energy exists as locked-in artificial potential, not EM force field energy (gradient bleed-off of potential).

In the exothermic mode, the ground potential of the transmitter is biased well above the ground potential of ambient vacuum. Energy enters the transmitter and "disappears", to "reappear" in the distant interference zone.

If continuous wave transmission is used, the energy continuously appears in the distant zone.

If pulse transmission is used and timed so that the two scalar pulses meet in the distant zone, energy explosively appears there.

If multiple frequencies are transmitted in the manner of a Fourier expansion of a particular geometric form, then a 3-dimensional energy form appears at the distant intersection. In this manner, a spherical or hemispherical shell (a globe or "dome" of EM energy) can be created at a distance. If pulse transmission is used, this will be an impulsive or explosive emergence of that energy form. If continuous transmission is used, this will be a continuous glowing form.

By feeding incredibly powerful transmitters with large amounts of energy extracted from the earth's molten core by "energy taps," very large spherical globes and hemispherical domes of EM energy can be created. The energy in the interference "shell" of such a sphere or hemisphere is sufficiently dense to lift Dirac matter from the Dirac sea of the vacuum. Thus the shell contains a glowing plasma.

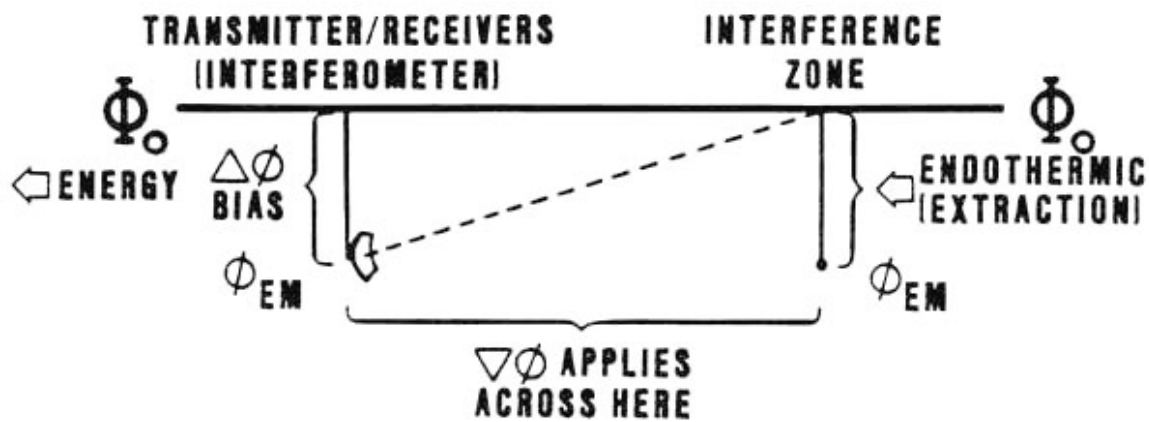
Many such scalar howitzer signatures have been seen over the oceans, particularly over the North Pacific by jet airliners flying into and out of Japan. Also, such globes and domes of light have been seen deep within the Soviet Union, by observers in Afghanistan and by pilots of aircraft landing in Iran.

In the impulsive exothermic mode, a large visible flash will occur if EM energy in the visible spectrum is produced. "Flashes" in the infrared may similarly occur, if the emerging energy is in that spectral band. In September 1979 our Vela satellites detected such a large "nuclear flash" over the South Atlantic, off the southern coast of Africa. A second "nuclear flash" detected by the Vela satellites in 1980 was in the infrared only. Some years ago, a series of anomalous "flashes" and "booms" occurred off the east coast of the United States. These were due to the orientation and alignment -and registration -- of one or more Soviet "scalar howitzers" -- scalar EM interferometers in the exothermic mode.

Large "booms" occurred over the shuttle launch site at Cape Canaveral, associated with three shuttle launches prior to the end of November 1985. These were tests of such exothermic scalar EM howitzers, being tested as part of the Soviet Launch Phase ABM system. In that mode, the scalar pulses from the two transmitters are injected into special zero-reference scalar EM "channels" established in the EM carriers of the Woodpecker over-the-horizon radars. The scalar pulses travel through these channels, traveling in the ordinary EM beam of the transmitter and following it in its curvature around the earth in the earth-ionospheric waveguide. The scalar pulses are timed, phased, and oriented so as to meet the rising shuttle. In these tests the transmissions were offset in time so the shuttle would not actually be destroyed, but the system could be tested against actual shuttle launches in the U.S.

The specific uses of these various exothermic modes will be covered in later parts of the briefing.

ENDOTHERMIC MODE (SCALAR INTERFEROMETER)

SLIDE 41.

In the endothermic mode, the bias on the transmitters is such that energy is extracted from the distant intersection zone, to re-emerge at the transmitters. There the energy must be caught and disposed of if it is not to burn out the transmitters. When very large amounts of energy are extracted from distant points, the Soviets often use a "dump" method of temporarily capturing, and storing in an accumulator, the heat energy emerging at the transmitters. A second howitzer in the exothermic mode is then fed by a "scalar energy tap" established into the accumulator. This howitzer is focused on a distant dump site -- often Bennett Island, where exhausts are continually observed by U.S. weather satellites.

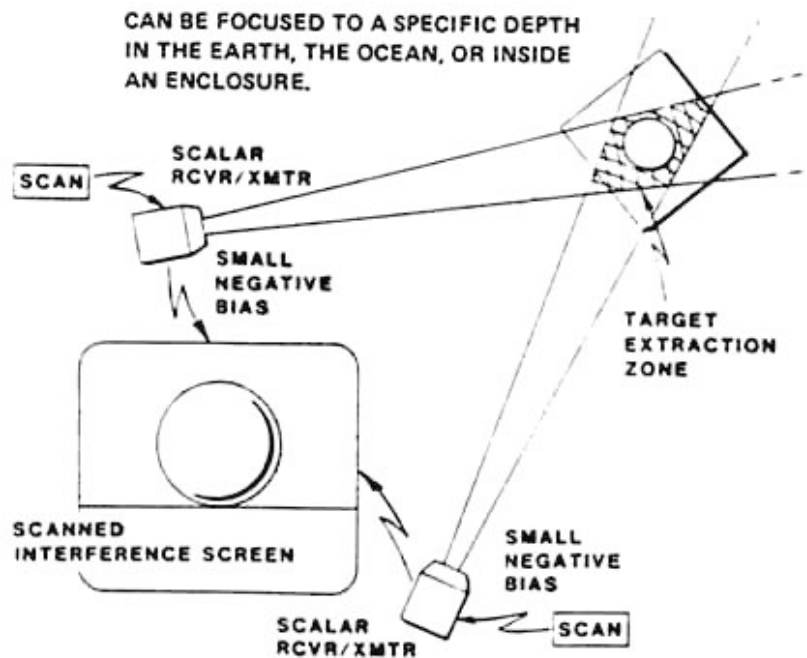
In the impulsive endothermic mode, energy is impulsively extracted from the distant intersection zone. In the atmosphere this results in a very sharp cooling, or a "cold explosion." It also results in the type of boom and rumble often associated with thunder after a lightning bolt.

On April 9, 1984 the Soviet Union tested such a "cold explosion" off the coast of Japan, near the Kuril Islands. In the suddenly induced low pressure "cold zone" above the ocean, ocean water was sharply sucked up from the ocean, forming a dense cloud. Then air rushing in to the low pressure zone forced the cloud upward, forming a mushroom much like that of an atomic explosion in visual appearance, except for the absence of a flash and the absence of a giant shock wave moving out away from the site of the explosion. (In this case the Soviets controlled the rise time of the pulse so that no "giant atmospheric boom" occurred.).

As the cloud rises, it expands by mixing -- very similar to a giant thunderhead buildup, except much faster. In this case the cloud rose to 60,000 feet in about 2 minutes, spreading out until it reached a diameter of about 200 miles. The incident was seen by the pilots and crews of several Boeing 747 jet airliners in the general vicinity. Sometime after that, a U.S. weather satellite photo of the area occurred. The cloud in that photo has an anomalous density distribution, differing from that of all other clouds in the area.

TESLA'S "BIG EYE" FOR REMOTE VIEWING

SLIDE 42.



Nikola Tesla also planned a very special use for his endothermic scalar interferometer. He planned to produce what he called his "big eye to see at a distance."

This is accomplished as shown on the diagram. First, the system is only weakly endothermic, so that only a small amount of energy is extracted from the distant target. Also, the beams are "scanned" by an open receiver, timewise, from side to side and top to bottom. By scanning yet another single beam through the intersection zone and phasing its pulses, an even better representation can be obtained. Thus the receiver produces a representation of the energy extracted from various locations within the distant endothermic zone. By displaying the received signals on an appropriately scanned screen, a representation of the distant scene in the intersection zone can be created. Indeed this is a special kind of "microwave interferometry," and -- with modern techniques -- the imagery obtained might be surprisingly good. With development, it might even become as good as the image presently obtained by side-looking acquisition radars.

Interestingly enough, since scalar EM beams will easily penetrate the earth or the ocean, one can also look beneath the earth or beneath the ocean with this type of scanning scalar interferometer.

The importance of this capability to strategic and tactical reconnaissance is obvious. Camouflage, cover, and concealment have no effect on such a system. One can easily look inside buildings and into underground facilities. With a small system such as this, the U.S. Marines at Khe Sahn would have had little difficulty locating the tunnels continually dug under the perimeter by the Viet Cong. And targets under jungle canopies are directly visible.

BACKGROUND FOR THE BRIEFER:

It requires little imagination to see that this system is easily adapted to produce an "underwater radar." With such devices, the problem posed by the underwater nuclear submarine is solved. For example, an entire area can be continually searched, much like acquisition radar systems do now. A submarine can be detected and tracked, and none of its ordinary detectors will detect anything out of the ordinary. By using a separate pair of beams in the exothermic mode, powerful scalar pulses can be fired at the distant sub, intersecting at the submarine in a violent EMP throughout the sub and its armament. Thus the sub and all its missiles are destroyed instantly.

Or, continuous exothermic transmission can be used by the targeting weapon at lesser power, gradually interfering with the sub's electrical systems and causing it to lose control. The sub then sinks to crush depth and implodes.

Precisely that scenario seems to be what happened on April 10, 1963 to the U.S.S. Thresher nuclear submarine. It left a signature: the sub's surface companion, the nearby U.S.S. Skylark, was in the "splatter zone" of the underwater scalar interference. That is, spurious EM noise was being generated in all the Skylark's electrical systems, some of which were actually disabled. So intense was the "electronic jamming" that it required over an hour and a half for the Skylark to transmit an emergency message back to its headquarters that the Thresher was in serious trouble and contact with it had been lost. Some of the Skylark's communication systems actually failed, but later resumed operation inexplicably, once the jamming was gone. That type of "jamming" of multiple bands and multiple electronic equipments, of course, together with the anomalous failure of electronic equipment and its later mysterious recovery, were direct signatures of the use of the exothermic scalar interferometer against the undersea target area in the vicinity of the Skylark.

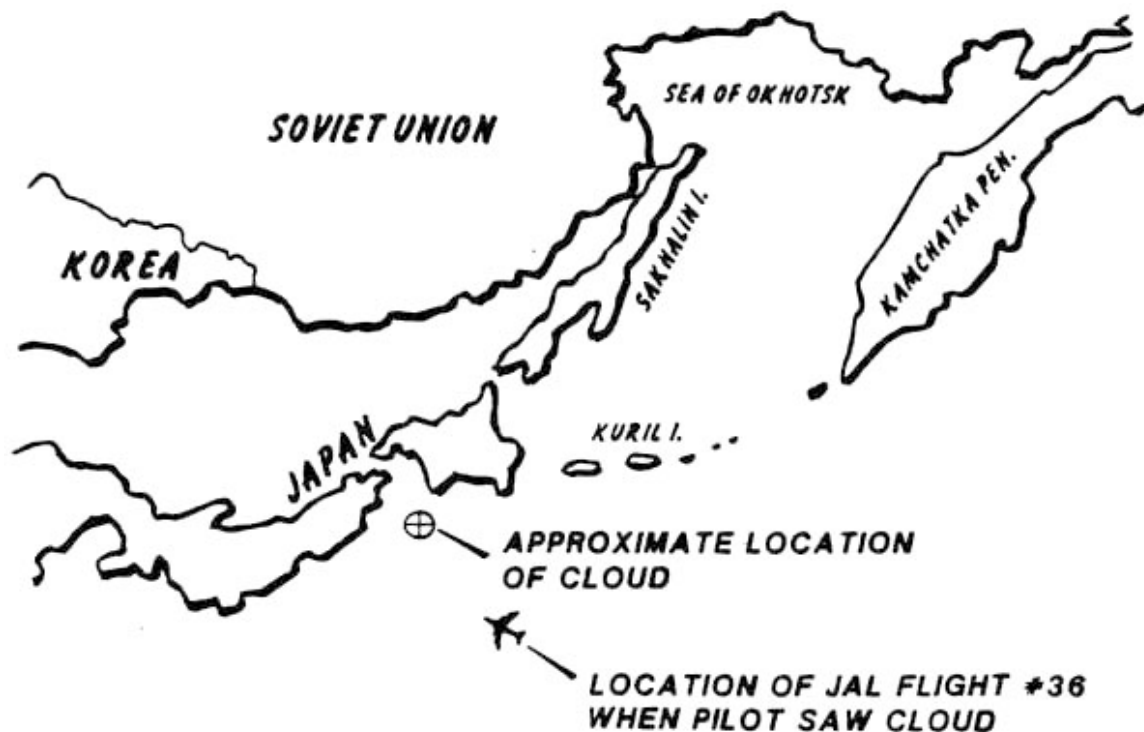
The very next day, Apr. 11, 1963, the same Soviet scalar EM howitzer system was tested in the "destroy submarine" pulse mode. A huge underwater EM blast occurred off the coast of Puerto Rico, about 100 miles north of the island. The underwater explosion caused a huge boiling of the surface of the ocean, followed by the rising up of a giant mushroom of water about a third of a mile high. The mushroom of water then fell back into the ocean, completing the signature.

Fortunately the entire incident was seen by the startled crew of a passing U.S. jetliner which was just passing its checkpoint in that area. (See Robert J. Durant, "An Underwater Explosion -- or What?", Pursuit, 5(2), April 1972, p. 30-31.)

These two incidents were full-up operational tests of Khrushchev's newly-deployed superweapons. He probably staged this dramatic one-two punch in a desperate effort to recover face with the Communist Party after his disastrous facedown by Kennedy in the Cuban Missile Crisis a few short months previously. Apparently the attempt was successful, since he remained in power another year before being deposed.

SITE OF MYSTERY CLOUD

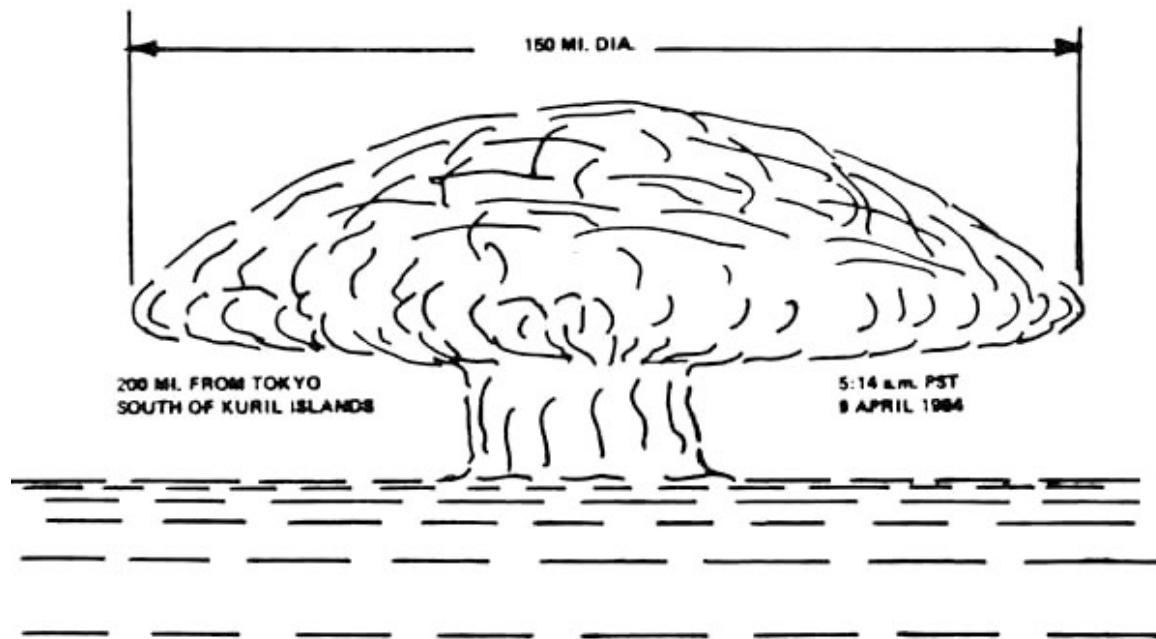
SLIDE 43



On this slide we show the location of the "cold explosion" off the coast of Japan on April 9, 1984. The site of the explosion was only about 200 miles from downtown Tokyo. It was seen by the crews of several jet airliners, including Japan Air Lines Flight 36.

MUSHROOM CLOUD FROM SEA OFF JAPAN NEAR RUSSIAN TEST AREA

SLIDE 44



A short time before, the Soviets had hastily announced missile tests would be conducted into a zone some distance away from the cold explosion site. This may have been intended as deception to cover this incident, should any foreign nation indicate they understood what was going on.

It also was a direct "stimulus" to the Japanese and the rest of the world: That is, stimulate the system and see if the scientists recognize what happened. If they do, then they know about scalar EM weapons. If they don't, then their countries know nothing of scalar EM weapons, and those countries are defenseless against them.

At any rate, at about 5:14 a.m. Pacific Standard Time on April 9, 1984, a giant mushroom cloud erupted above the ocean south of the Kuril Islands. The mushroom rose rapidly, expanding as it rose. In two minutes it had reached an altitude of 60,000 feet and a diameter of about 200 miles.

One pilot of a Boeing 747 who observed the cloud was a former B-52 bomber pilot. He described the cloud as very similar to a mushroom cloud from a gigantic nuclear explosion, except there was no flash of visible light. Taking evasive action, he turned off course away from the blast, and braced for a blast shock wave which never came.

MUSHROOM CLOUD RISING FROM THE SEA (COLD EXPLOSION)

SLIDE 45.

- 0514 HRS, 9 APRIL 1984
- GRAY-WHITE CLOUD APPEARED
- ROSE 60,000 FT IN 2 MIN.
- 180 MI. S.E. OF HOKKAIDO
200 MI. FROM TOKYO
SOUTH OF KURIL ISLANDS
- SOVIET MISSILE TESTING SCHEDULED ABOUT 350 MI.
AWAY, AT 2100 HRS 9 APRIL 1984

Indeed, this highly anomalous cloud was due to a cold explosion -- a test of a Soviet scalar EM howitzer in the pulsed endothermic mode.

In the weapon's targeted interference zone, EM energy (heat) was rapidly withdrawn when the biased endothermic extraction occurred. Above the ocean an intense low pressure zone was created. Water from the ocean was sucked up, as if by a giant vacuum cleaner. The water was violently broken into droplets, forming a dense cloud, with a strong upward momentum.

The surrounding higher pressure air rushed into the low pressure zone, pushing the rising dense cloud of water vapor upward as its upward momentum continued. Mixing caused rapid expansion of the rising cloud, causing its density to thin measurably as it rose and expanded. An effect very similar to the formation of a strong thunderhead resulted, except much faster.

The mixing cloud also resembled the mushroom cloud from a giant nuclear explosion, just as an emerging thunderhead does.

But no outward blast wave resulted as does from a nuclear explosion. Also, no visible flash occurred, probably as a result of deliberate design by the Russians.

Thus a beautiful "stimulus" and test was conducted: quite a few airliners were "pinged," providing a high-level stimulus to competent observers. The news was sure to be reported by them to several nations. The press was sure to pick up the story. This was a high order stimulus to see whether the U.S., Japan, or other potential adversaries of the Soviet Union recognized the testing of a cold explosion weapon.

By our reaction, we assured them (with high confidence) that we still knew nothing of scalar EM interferometry or cold explosions.

MUSHROOM CLOUD FROM SEA OFF JAPAN

SLIDE 46

- **FIVE BOEING 747'S FLEW THROUGH OR NEAR THE CLOUD**
 - NO CONTAMINATION
 - NON-NUCLEAR
- **OCEAN 21,000 FT DEEP**
 - TOO DEEP FOR SUBMARINE VOLCANO TO CAUSE CLOUD
 - INDICATES MAN-MADE PHENOMENON

Five Boeing 747's flew through or near the cloud on their way to Anchorage, Alaska. The aircraft were checked at Anchorage for radioactive contamination, but nothing was found. This showed that the huge "explosion" had been non-nuclear.

The ocean in the area is also about 21,000 feet deep. That is really too deep for a submarine volcano to have erupted and caused the cloud. (Besides, a volcano would have continued to snort at least a bit, and so that appears to be out of the question as a possible cause of the incident.)

In short, a manmade phenomenon is indicated.

Indeed, we know it was a cold explosion. As I've stated previously, a colleague has in fact produced the basic effect over a dish of water in the laboratory, using a small scalar interferometer in the endothermic mode.

NOT A KNOWN NATURAL PHENOMENON

SLIDE 47

-

- **DR. DANIEL A. WALKER ET AL**

- **GEOPHYSICIST, UNIV. OF HAWAII**
- **MONITORS ARRAY OF HYDROPHONES**
 - **ON OCEAN BOTTOM**
 - **RECORDS SIGNALS (SEISMIC, VOLCANIC)**
- **DATA SHOWS ABSENCE OF ANY NATURAL SEISMIC OR VOLCANIC EVENT THAT COULD HAVE CAUSED THE 9 APRIL PHENOMENON OFF THE COAST OF JAPAN.**
- **PUBLISHED IN SCIENCE.**

Further, the story does not end there.

A geophysicist at the University of Hawaii, Dr. Daniel A. Walker, together with his colleagues monitor an array of hydrophones on the ocean bottom, recording signals such as seismic incidents, volcano eruptions, etc.

Dr. Walker and his colleagues performed a comprehensive analysis of the data recorded by the hydrophones in and around the time of the incident in question. The data shows the absence of any natural seismic or volcanic event that could have caused the April 9th phenomenon off the coast of Japan.

He and his colleagues concluded that it was either an as yet unknown natural phenomenon, or a man-made phenomenon.

Their report is published in Science. (Walker et al, "Kaitoku Seamount and the Mystery Cloud of 9 April 1984," Science, 227(4687), Feb. 8, 1985, p. 607-611.)

EXPLOSIVE EVENTS SEEN ON SOVIET ISLAND

SLIDE 48

Aviation Week and Space Technology September 26, 1983

Here are two U.S. weather satellite photos of the anomalous exhausts on Bennett Island we previously referred to.

The exhaust in the left picture is about 150 miles long, and is nearly horizontal (about 1.5 degrees above the horizontal). It is entirely consistent with the continuous exhaust from a "dumping transfer" scalar EM howitzer in the continuous exothermic mode. (The primary howitzer, of course, was activated in the endothermic mode.)

I think any open-minded investigator must admit that that is indeed a very powerful jet-like exhaust, and not like anything one ever sees from a natural volcano or geological gas vent. If anyone knows of such an anomalous volcanic or geological exhaust, I would be most delighted to see a photo or report. To my knowledge, no such natural photo exists, and no such natural exhaust has ever been reported.

The right picture shows the "puff" of an explosive emergence of the exhaust. In other words, this one is the exhaust from a "dumping transfer" howitzer used in the pulsed exothermic mode. Since it did not have so much energy to dump, it could dump it in a pulse. Again, the primary howitzer, of course, was activated in the endothermic mode.

Over 100 weather satellite photos of these anomalous exhausts have been taken since 1974.

One or more U.S. aircraft have even been vectored through the exhausts, and samples of the exhaust taken and analyzed. The exhaust is made up of a little clay and mud and water, and is colder than the surrounding air.

EXPLOSIVE EVENTS SEEN ON SOVIET ISLAND

SLIDE 49

Aviation Week and Space Technology September 26, 1983

These exhausts from Bennett Island are euphemistically called plumes by U.S. weather analysts.

Here is another U.S. weather satellite photo, showing the twin emergence of multiple puffs.

One might expect such exhausts if the secondary "dumping transfer" howitzer is operated in the continuous mode, with continuous extraction by "power tapping" the accumulator of the primary howitzer. In that case, the operation of the primary howitzer would be exposed by the signature of the exhaust. For example, this exhaust would indicate multiple puffs, hence probably multiple frequencies and multiple primary transmitters, each phased in a controlled manner. That of course indicates the production of Fourier expansion forms -- of 3-dimensional geometrical forms -- by the primary howitzer(s). Since these are puffs, it may indicate the explosive formation of distant spherical balls of energy by the primary howitzer. This in turn indicates the use of a howitzer system in the "pulse firing" mode, which can be used against missiles, ships, aircraft, ground targets, armored vehicles, underwater targets, etc.

BENNETT ISLAND, WRANGEL ISLAND, AND NOVAYA ZEMLYA

SLIDE 50

This slide shows the location of three areas of interest relative to Soviet scalar EM weapons testing.

Wrangel Island, north of the northeastern portion of the Soviet mainland, is associate with tests of these weapons in large circular breakups of the ocean's ice cover. This of course could aid submarines which wished to surface and fire cruise missiles, or submarines which wished to fire from underwater and needed the ice broken up.

Strangely enough, Wrangel Island has a most peculiar history: legally it still belongs to the U.S., but has been "given" to the Soviet Union without permission of the U.S. Senate, which is illegal.

Bennett Island, a little farther to the west and still north of the Soviet mainland, is noted for its phenomenal number of anomalous exhausts as previously discussed.

North of the Soviet mainland and near its middle lies the large island of Novaya Zemlya. Weather satellites have taken pictures of anomalous circulations over this island which are further candidates for exhausts from scalar EM howitzer operations.

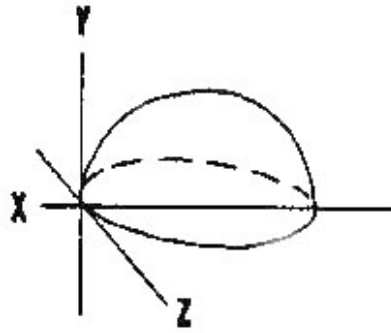
CREATING A SPATIAL Ø-FIELD PATTERN

SLIDE 51

TRUNCATED FOURIER EXPANSION (3D)

$$y = y_0 + f_1(\lambda_1) + f_2(\lambda_2) + \dots + f_n(\lambda_n)$$

$$z = z_0 + g_1 (\lambda_1) + g_2 (\lambda_2) + \dots + g_n (\lambda_n)$$



NOTE:
INTERFERENCE OF TWO SUCH
SCALAR HEMISPHERES CREATES
A "GLOWING HEMISPHERICAL
SHELL"

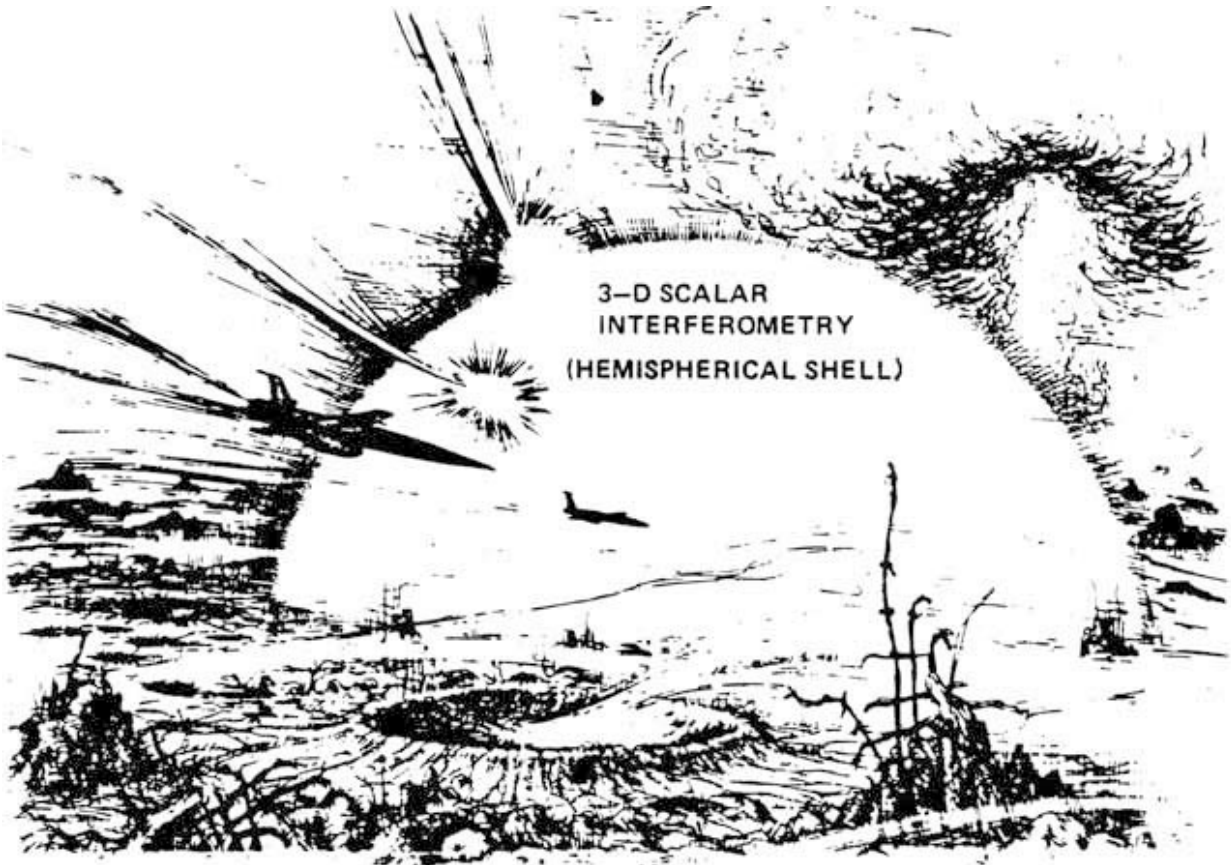
On this slide we show that a hemispherical dome (or other regular shape) can be composed from scalar waves by 3-dimensional Fourier expansion. By truncating the expansion -- say after 10 or 12 frequency terms -- a good representation of the desired form can be obtained with a practical number of frequencies, and in turn a practical number of transmitters. A computer is used to compute the multiplying functions for each frequency, and the entire complex of frequencies is then transmitted to produce the scalar form. By interfering two such scalar forms, a 3-dimensional shell of locked-in, ordinary EM energy is formed in space.

Interference of two such scalar hemispherical surfaces creates a "glowing hemispherical shell or dome of energy." Interference of two such scalar spherical surfaces creates a "glowing spherical shell or globe of energy."

Both such geometric forms have been repeatedly seen.

TESLA SHIELD

SLIDE 52



Of particular interest is the hemispherical shell of energy, which years ago I dubbed the "Tesla shield."

As shown on this slide, two scalar hemispherical surfaces are created, using multiple frequency transmitters

and truncated Fourier series expansions. Interference of the two scalar hemispheres creates a great, glowing hemispherical shell of ordinary electro-magnetic energy. In the shell, the energy density is sufficient to lift Dirac matter from the Dirac sea of vacuum. The shell is thus filled with a glowing plasma.

Such a shell may be several hundred miles in diameter at the base. The enormous energy required to form such a defense shell is obtained by a "scalar power tap" into the molten core of the earth itself, as previously explained. In late April/early May of 1985, 27 such "power taps" were placed in the earth by the Soviets. If each tap is capable of powering four to six large scalar EM weapons, then the Soviet strategic scalar EM arsenal contains over 100 monstrous superweapons capable of generating exothermic explosions, endothermic explosions, engineering the weather, locating and destroying underwater submarines, detecting and destroying ballistic missiles shortly after launch, detecting and destroying long range strategic bombers as soon as they are airborne, etc.

At any rate, the giant Tesla shield is useful against any penetrating vehicle. If the shell is not so large, its energy density may be very high. In that case, the intense plasma heating will fuse and even vaporize metallic bodies. In addition, any vehicle encountering the shell is subjected to an extremely intense EMP arising everywhere inside its circuitry. EM shielding is of no use against the creation of energy throughout the spacetime of the circuits; such shielding only helps against energy flow through space in the conventional sense.

Thus the electronics of any vehicle encountering the shield are instantly duded, whether or not they are shielded against ordinary electromagnetic interference (EMI). This includes the electronics operating a nuclear warhead, carried by a re-entry vehicle. Electrically everything penetrating the shell is totally duded. Further, explosive materials are exploded when such an EMP is encountered, and combustible materials are fiercely consumed or set afire. Ablative shielding suffers an interesting catastrophe: since energy does not try to "flow into" the shielding but "arises everywhere in it simultaneously, "ablation" occurs everywhere throughout the ablative material, simply exploding it instantly. In addition, for smaller Tesla shells (say of 50 miles diameter) the energy density is sufficient to melt or vaporize metals such as in missile structures.

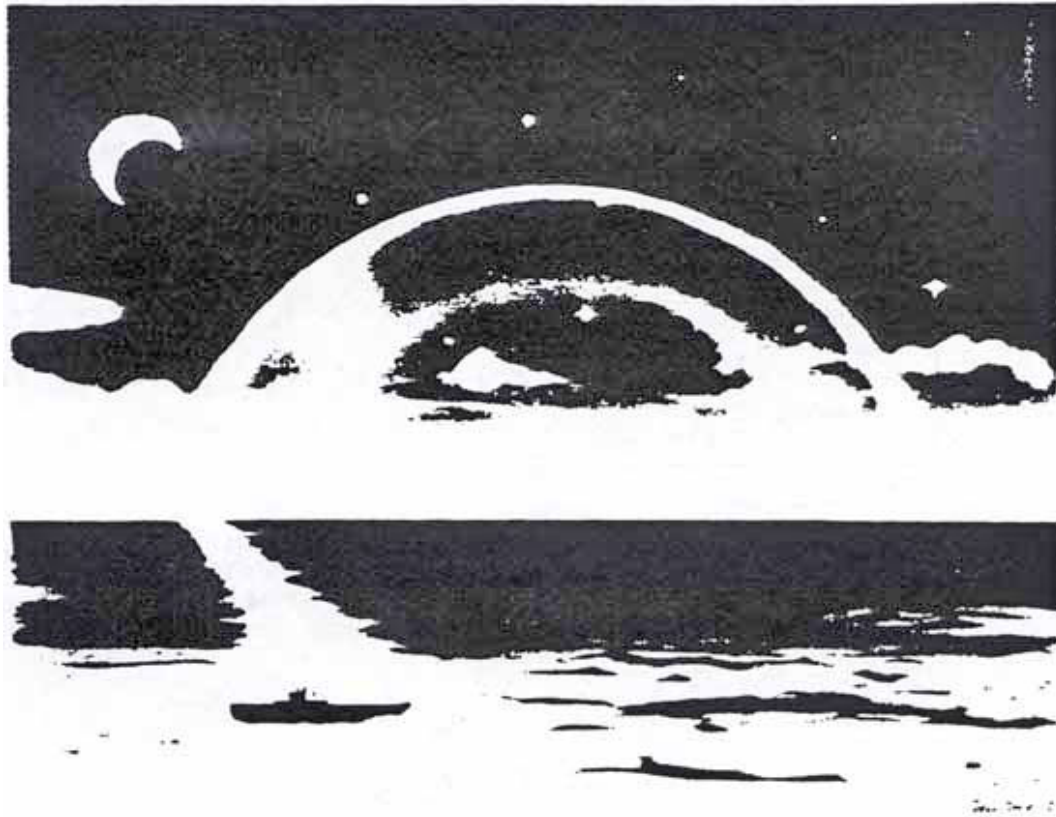
With such a Tesla shield, there is no need to discriminate true warhead-bearing re-entry vehicles from decoys, chaff, etc. The entire "mess" entering the shield is simply "cleaned up" and "sterilized" or destroyed. The shield can take care of ICBMs/IRBMs and their nuclear warheads, strategic bombers and their nuclear bombs, cruise missiles and their nuclear warheads, re-entry vehicles and their warheads, decoys, chaff, etc.

EXPANDING DOME-LIKE PHENOMENON

SLIDE 53

MARINE OBSERVER 40:17, 1970

MAR 20, 1969
CARIBBEAN AND WESTERN
NORTH ATLANTIC



Here we show one instance of apparent Soviet testing of the Tesla shield (hemispherical shell of energy) over the ocean.

This incident occurred in the Caribbean and Western North Atlantic Ocean on Mar. 20, 1969 and is reported in the Marine Observer, Vol. 40, 1970, p. 17.

A semicircle of milky white light, quite intense at first, was sighted on the horizon. The semicircle enlarged, dimming as it expanded. The incident lasted for about 10 minutes.

Seen from a passing ship, the top of the hemisphere reached a sighting elevation angle of about 50 degrees, while the base of the hemisphere of light subtended an arc of about 70 degrees.

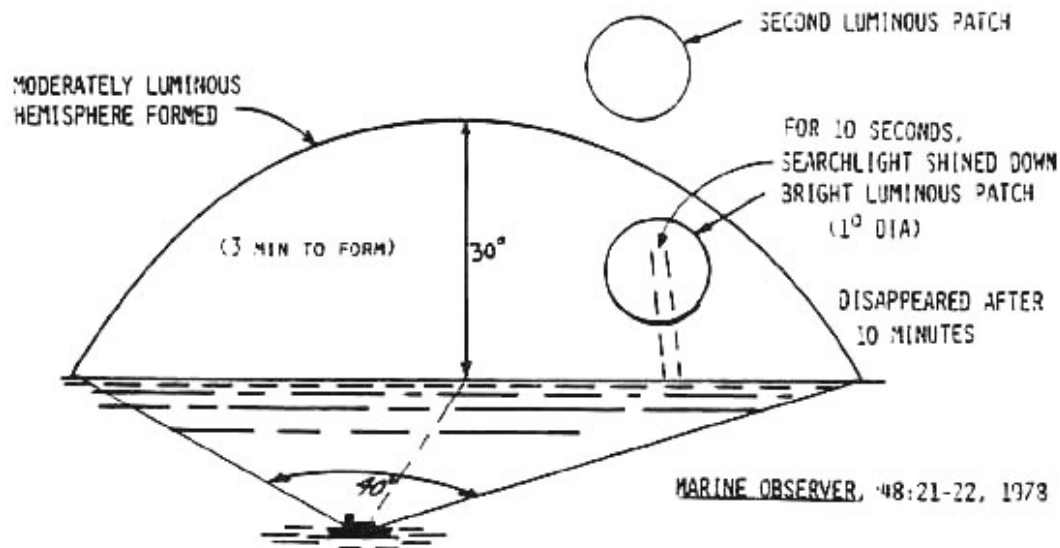
This is directly indicative of a test of the Tesla shield, first as a small, more intense shield and then expanding to greater size for a less intense shield whose primary destructive mechanism is EMP. Note that the EMP in a Tesla shield is locally contained in the energy-bottle shell. It is not an ordinary EMP of energy radiated_out of the shell.

HEMISPHERES AND GLOBES 1977

SLIDE 54

NOT TO SCALE

0855 GMT
24 MAR, 1977
23°05' N; 17°25' W
M.V. KINPURNIE CASTLE



Here is a second instance of apparent Soviet testing of the hemispherical Tesla shield over the ocean. This time it is combined with simultaneous testing of two smaller scalar interferometers creating Tesla globes of EM energy.

This incident occurred at 23 degrees 5 minutes north, 17 degrees 25 minutes west. It was sighted and reported by a British ship, H.M.V. Kimpurnie Castle, on Mar. 24, 1977. The report is in the Marine Observer, Vol. 48, 1978, p. 21-22.

First a large, moderately luminous hemisphere of light formed, requiring about 3 minutes to do so. Seen from the ship, the top of the hemisphere was at a sighting elevation angle of about 30 degrees, while the base subtended an arc of about 40 degrees. This was the basic Tesla shield.

Then two other luminous globes or patches of light, each of about 1 degree diameter as seen from the ship, formed in the same area; one inside the shield and one outside it. From the glowing globe inside the shield, a light beam similar to a giant searchlight shone down to the ocean's surface for about 10 seconds.

Again the phenomena lasted about 10 minutes and then disappeared.

The luminous globe or patch inside the hemisphere might be the test of a second weapon deployed from a Soviet aircraft in the area. If so, the aircraft has placed a strong spherical shield around itself. In addition, the aircraft is utilizing some sort of scalar interferometer beam weapon in an underwater mode. Probably this would imply a "shot" at a hostile nuclear submarine inside the shielded zone. Thus this aircraft would have the scalar EM equipment to search for the underwater sub and detect it, and also to concentrate interference energy upon it underwater, destroying it quickly.

Suffice it to say that it is possible to perform scalar interferometry by means of a single beam, in a proprietary process discovered by a close colleague. Thus the "glowing beam to the ocean" resembling a searchlight makes very good sense in the anti-submarine role. The same weapon, of course, could also attack any hostile surface vessel which might have been inside the shielded area at its formation.

The second luminous globe or patch, outside the hemisphere, is probably from a second scalar interferometer from the naval task force, simulating the continuous attack of a certain target (missile or aircraft) outside the protective dome.

As can be seen, this phenomenon is directly indicative of the types of operations one would expect from the testing of Soviet scalar EM weapons at sea, possibly to protect a Soviet naval task force during simulated combat operations.

SARYSHAGAN DIRECTION -- SEPTEMBER 1979 (SEEN FROM AFGHANISTAN)

SLIDE 55



Multiple Events Seen in Sept 1979 from Afghanistan

Strange lurid glow that flared silently over the Hindu Kush; as described by Nick Downie.

The SUNDAY TIMES, 17 August 1980

Figure 12A. Witness to a Super-Weapon?

The London Sunday Times of 17 August 1980 contained information and a photo-sketch of incidents of sighting of the testing of very large Tesla globes deep within the Soviet Union. The sightings were made from Afghanistan by British war cameraman Nick Downie. The phenomena seen were in the direction of the Saryshagan Missile Test Range, which – according to the U.S. Defense Department's Soviet Military Power, 1986 – contains one or more large directed energy weapons (DEWs).

Even though Downie was seeing the giant globe of light from a great distance, it flared silently over the Hindu Kush and expanded to subtend an arc of about 20 degrees, dimming as it expanded. (An arc of 20 degrees subtended by an object many hundreds of miles distant indicates an object of well over a hundred miles in diameter. This gives some idea of the enormous energy being controlled and manipulated by these Soviet weapons.).

Downie saw the sight on more than one occasion in September 1979.

BACKGROUND FOR THE BRIEFER

In the same month – September 1979 – a stationary luminous globe containing a vertical stripe of black in the center was seen in the sky off Saint Petersburg, Florida. This particular type of sighting in that area has been previously correlated with times of known activity at Saryshagan.

Further, in the same month U.S. nuclear-warning Vela satellites detected a mysterious "nuclear flash" over the South Atlantic, off the coast of Africa. Controversy has raged in U.S. intelligence and scientific circles to this day as to whether a nuclear explosion or some other mechanism produced the flash.

Indeed, the flash may have been produced by a scalar EM howitzer from Saryshagan as one more "ping" of the U.S. intelligence system, to ascertain whether or not it knew anything about scalar EM howitzers. Again, the negative response told them with high confidence that (1) we still didn't know about scalar EM stuff, and (2) we were still absolutely defenseless against the Soviet scalar EM weaponry.

In 1980, a second "Vela flash" was reported. This time it occurred in the infrared region only, which positively rules out any sort of nuclear explosion. Even this increased stimulus still evoked a U.S. action that revealed total ignorance of scalar EM weaponry.

An alternate possibility for the September 1979 Vela flash also exists: countries not hostile to the U.S. may have tested a scalar EM weapon that produced the flash.

At any rate, from Downie's sightings, it is highly probable that the DEW weaponry at Saryshagan Missile Test Range was active in September 1979, and was producing huge Tesla globes. If the DEWs at Saryshagan can produce the giant luminous Tesla globe, they almost certainly are scalar EM interferometers and can produce the giant Tesla shields as well. Downie reported other earlier sightings of similar phenomena seen by Afghans deep within the Soviet Union in the same direction toward Saryshagan.

Briefly let us cover the uses of such a "giant globe" or spherical shell of glowing EM energy and plasma.

By placing such a "giant globe" thousands of kilometers out away from the defended heartland, an entire arc of the sky can be defended against long-range ballistic missile attack in midcourse. During their midcourse trajectory, the attacking missiles would have to penetrate the globular shell twice, exposing them to giant internal EMPs twice. A very high probability thus exists that all missiles entering the space occupied by the globe are duded upon entry and/or exit. This includes the electronics inside the nuclear warheads themselves. Also, this is particularly effective against MIRV and MARV missile carriers, since the multiple re-entry vehicles are normally still on the main vehicle during most of midcourse. The use of this midcourse ABM globe defense greatly reduces the number of vehicles

arriving at the latter part of midcourse and at the terminal phase of their trajectory.

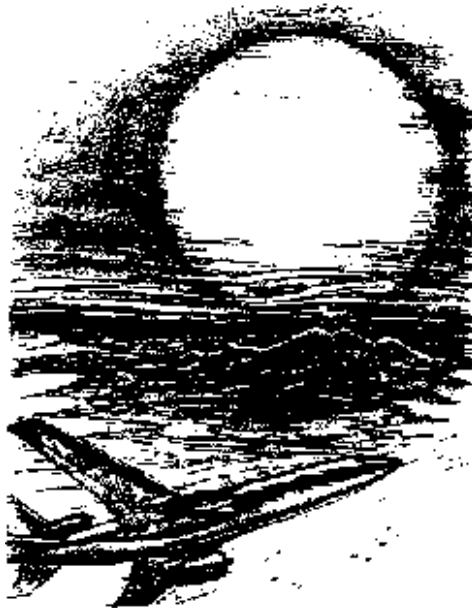
By using a smaller, more intense globe and placing it on incoming clusters of objects or single objects, both EMP and intense local heating are used against the objects. This is suitable in the latter part of midcourse and in the terminal phase of ICBM's, IRBM's, SLBM's, and cruise missiles. It is also useful against incoming strategic bombers and their air-to-surface missiles, both ballistic and cruise.

Two modes of the globes -- especially the small ones -- can be used. First, the continuous mode can be used to "fry" or vaporize incoming objects in a relatively small volume (say two or three tens of kilometers in diameter). Second, the "pulse" mode can be used to "service" all incoming objects, whether or not they have passed through the "large globe" midcourse defense. This provides an additional guarantee of killing the objects; discrimination is not required, just service all of them. The exposure of all incoming objects to multiple attacks raises the probability of kill to essentially 100%, or as close to that as one wishes. Of course the incoming vehicle may still encounter a terminal defense consisting of the Tesla shield and associated roving "quickshot" small intense globes.

In short, with these systems an essentially 100% ABM and anti-bomber defense is possible. Further, the Soviets have possessed such an effective defense for two decades, just as they have openly stated.

CONTINUOUS TESLA EMP GLOBE

SLIDE 56



TEHERAN, IRAN 17 JUNE 1966

SEEN FROM NEAR MEHRABAD AIRPORT

OBSERVED 4-5 MINUTES

SEEN BY 2 AIRCRAFT

CIA REPORT RELEASED UNDER FOIA

Here is another verified incident of a gigantic test of a Soviet scalar EM howitzer deep within the Soviet Union.

This is a CIA report, released under the Freedom of Information Act. One can be quite sure that the incident occurred as stated.

The phenomenon was seen from two aircraft approaching Mehrabad Airport in Teheran, Iran on June 17, 1966 and reported by their pilots.

On the far horizon deep within the Soviet Union, an intense spherical ball of light appeared, "sitting on the horizon" so to speak. The globe of light increased to enormous size, dimming as it did so, literally filling an arc of the distant sky as it expanded. The sighting was shielded from most ground observers' view at the airport itself due to an intervening mountain range which masked most of the phenomenon from the ground.

The silent, expanding globe was observed for four or five minutes before it faded away.

BACKGROUND FOR THE BRIEFER

Again, this is positive evidence of the testing of a giant scalar EM interferometer, in the "midcourse ABM globe" type of action.

However, note the date --mid 1966! The Soviets have therefore been testing such scalar weapons of enormous size and power for at least two decades. This implies that development must have started at least a decade earlier, or in the mid '50s.

Still earlier in January 1960 Nikita Khrushchev had announced the development of a "fantastic" Soviet weapon, one which

could even destroy all life on earth if unrestrainedly used. In 1962 the ebullient Khrushchev was forced to back down and lose face before John Kennedy in the Cuban Missile Crisis. Khrushchev's missiles and bombers were in woeful shape, as Kennedy well knew (by courtesy of the Soviet spy, Colonel Oleg Penkovsky). Kennedy did not know that Khrushchev's new superweapons were nearing deployment, but were not yet quite ready.

To save face and prevent his immediate ouster, Khrushchev apparently conducted a startling two-strike demonstration of his new weapons as soon as they became operationally ready. On April 10, 1963 he detected and destroyed the U.S.S. Thresher nuclear submarine using a scalar EM howitzer in the underwater "continuous" mode. The next day he demonstrated the "pulsed" underwater destruction mode for nuclear subs by producing a giant underwater EM explosion underneath the ocean 100 miles north of Puerto Rico. Ironically, just as the Atlantic was coming alive with U.S. naval vessels searching for the lost Thresher, a second test of the weapons that had finished off the sub occurred to the south of them, unnoticed and disregarded, even though seen and reported (to the FBI and the U.S. Coast Guard) by a passing U.S. jetliner's pilot and crew, who observed the underwater explosion.

We thus can peg the development of these weapons by the Soviets as starting well before 1960. The first operational deployment of the giant strategic weaponry occurred in early 1963.

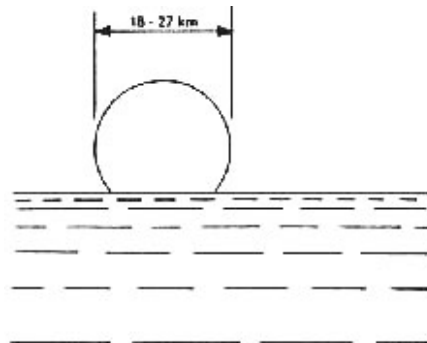
Note that the 1966 testing observed here is completely consistent with this estimated development schedule.

Thus large Soviet strategic scalar EM weapons have been operational on site for 23 years! This implies that at least three additional generations of the scalar EM weapons have been developed and deployed by now.

MYSTERIOUS LIGHT OVER NORTH PACIFIC

SLIDE 57

ASAHI EVENING NEWS
TOKYO
JUNE 22, 1982



SEEN FROM 42° N LAT
153° E LONG

- JUNE 18, 1982
- NORTH PACIFIC
- 700 km EAST OF KUSHIRO
- JAL FLIGHT 403
- JAL FLIGHT 421

NOTE:
SUCH INCIDENTS ARE
REPEATEDLY SEEN BY JETLINER
CREWS OVER THE NORTH PACIFIC

Incidents of Soviet testing of the Tesla shield and the Tesla globe weapons are routinely observed by airline pilots flying over the North Pacific into and out of Japan .

This is one typical example. Two jetliners, Japan Air Line flights 403 and 421, sighted and reported a large glowing globe of light sitting just beyond the horizon and extending well above it. The aircraft were in the vicinity of 42 degrees N latitude and 153 degrees longitude at the time. The sighting was thus about 700 miles east of Kushiro.

The diameter of the ball was estimated as at least 18-27 kilometers by the pilots. Depending upon the actual distance to the sphere, it may have been of much larger size.

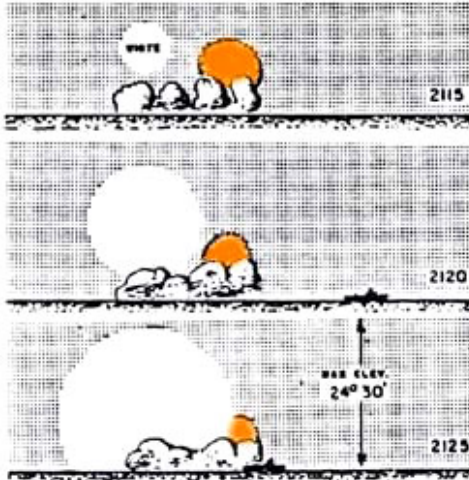
This incident is reported in the Asahi Evening News, Tokyo, June 22, 1982.

Many other similar sightings have been reported by the jet airliner pilots flying over these waters.

WHITE SPHERE SEEN IN NORTH ATLANTIC 1976

SLIDE 58.**MARINE OBSERVER, 47:66, 1977**

**JUNE 22, 1976
NORTH ATLANTIC
2113 - 2140 HOURS**



- 2113: ORANGE GLOW BEHIND CLOUDS
- 2115: WHITE SPHERE OBSERVED ALT 10°, BEARING 290°
- WHITE SPHERE DEVELOPED AS SHOWN
- STARS COULD BE SEEN THROUGH SPHERE AT ALL TIMES
- BY 2140 THE SPHERE HAD DISAPPEARED

Here is another sighting closer to home.

This incident was observed from a passing ship on June 22, 1976 in the North Atlantic, at about 2113-2140 hours. It is reported in the Marine Observer, Vol. 47, 1977, p. 66.

First, an orange glow was sighted behind some distant clouds. A couple of minutes later, a glowing white sphere of light was observed to the left of the orange glow, just above the clouds. The white sphere then slowly expanded to a much larger sphere, dimming as it expanded. At its maximum size, the top of the white sphere reached about 24 degrees 30 minutes elevation angle to the observer. Development to maximum size required about 10 minutes.

By 2140 hrs the sphere had faded and disappeared. The sphere was sufficiently thin that the stars could be seen through it at all times.

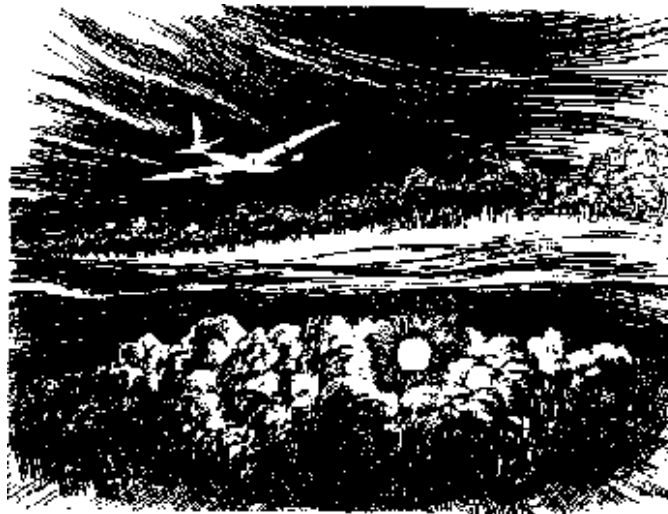
Again, this incident strongly fits the large Tesla globe mode of a Soviet scalar EM interferometer.

The significance and role of the orange glow are not known at this time.

CONTINUOUS TESLA FIREBALL

SLIDE 59

**LITHUANIA
10 SEP 1976**



**BRITISH
EUROPEAN
AIRWAYS
FLIGHT #831
BETWEEN
MOSCOW AND
LONDON**

CIA REPORT RELEASED UNDER FOIA

Here is another incident that represents a stimulus to the British government, to see if the British are aware of scalar electromagnetics.

Again, this is a CIA report released under the Freedom of Information Act, so the details are reliable.

On Sep. 10, 1976 British European Airways flight 831, flying between Moscow and London and over Lithuania at the time, observed an intense ball of light above the clouds below the aircraft. The light was so intense that it lit up the sky in the entire vicinity.

The concerned pilot reported the glowing object to the Soviet ground authorities with whom he was in contact. He received the harsh instructions to ignore the light, and essentially to continue on his way out of there.

Here we see an incident involving a small, intense Tesla globe, of the kind with which the defense could "service" objects that had already penetrated a large midcourse globe, or aircraft approaching the defended area.

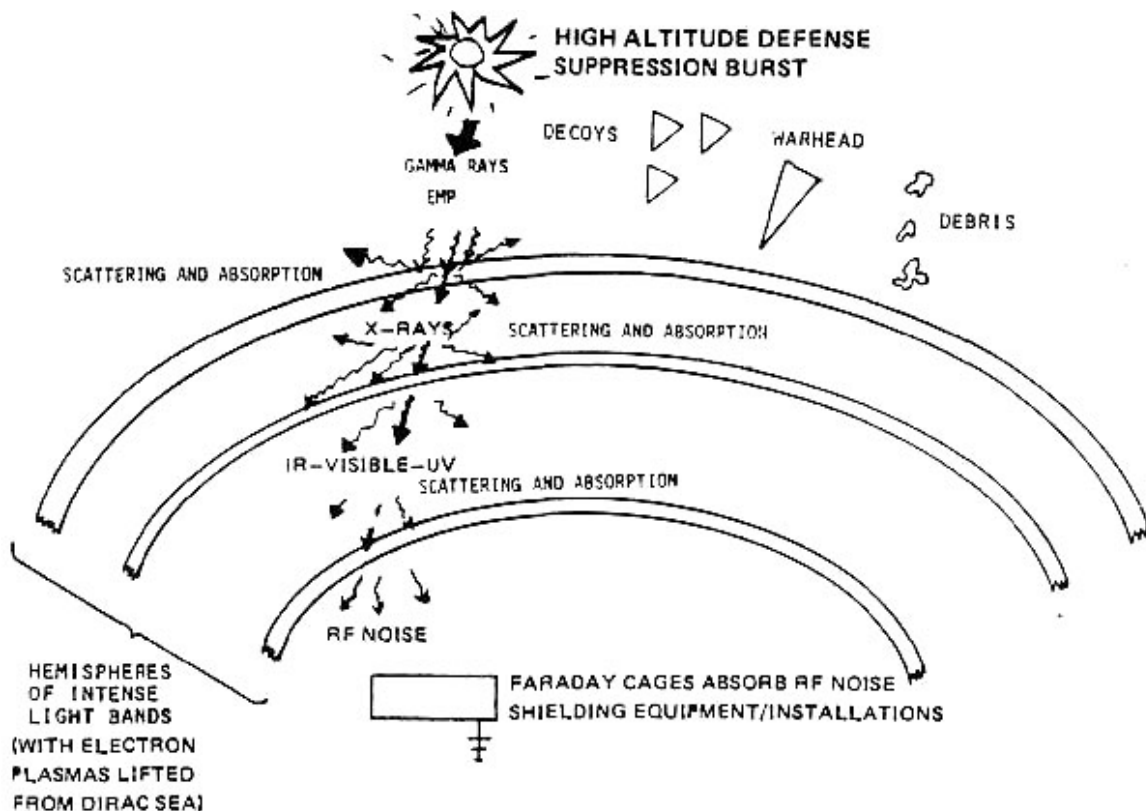
Obviously the Soviet authorities were tracking the aircraft, and knew it was in the vicinity. It seems logical, then, that they deliberately placed the brightly glowing ball beneath the aircraft so that the pilot and crew could not fail to observe it.

The strange message to the pilot was simply designed to increase the intensity of the stimulus. The stimulus was to be something like, "The Soviets are doing something in research and development that allows them to create intense balls of glowing light at a distance, and place these objects in the air in and around aircraft, possibly to intercept them." The purpose, of course, was to observe the British government's reaction after the incident was reported by the pilot upon his arrival at London.

Again the reaction of the British -- and the U.S. as well -- was as predicted. Again we showed that we knew nothing of scalar electromagnetic weapons, and did not recognize one when we encountered its effects.

TERMINAL ABM SYSTEM

SLIDE 60



Very neat things can be done if one nests several Tesla shields --say three or four --concentrically, one inside the other. In that case even the nuclear radiation (such as gamma rays) from a defense-suppressive high altitude nuclear burst can be handled.

For example, suppose three such concentric shields are placed over a large vital area. Further, suppose a high altitude nuclear burst is placed up above the outer shield. Gamma radiation almost instantly strikes the plasma in the outer shell, where it is absorbed, scattered, and re-radiated at lower temperature. (That, after all, is what plasmas do.) Inside the first shell, the scattered radiation is now in the x-ray and ultra-violet region. Let us track the most lethal component, the x-rays.

The scattered x-rays then strike the second plasma shell, and are absorbed, scattered, and re-radiated at lower temperature. Inside the second shell the scattered radiation is now in the visible and infrared region, with a little ultraviolet.

This optical radiation in turn strikes the third plasma shell, and is absorbed, scattered, and re-radiated at still lower temperature. Inside the third shell most of the energy is now in the form of radiofrequency (RF) energy, with a little IR and visible band spectral energy content.

At this point, ordinary electromagnetic interference (EMI) shielding of electronic equipments on the ground and inside the third shield can take care of any RF interference resulting from the emergent RF noise.

As can be seen, three shells are sufficient to convert the gamma and x-ray radiation (and ultraviolet and infrared) mostly to harmless RF energy before all three shells are penetrated. Thus the tactic of deliberate defense suppression by a preliminary high altitude nuclear burst can be countered by multiple Tesla shields.

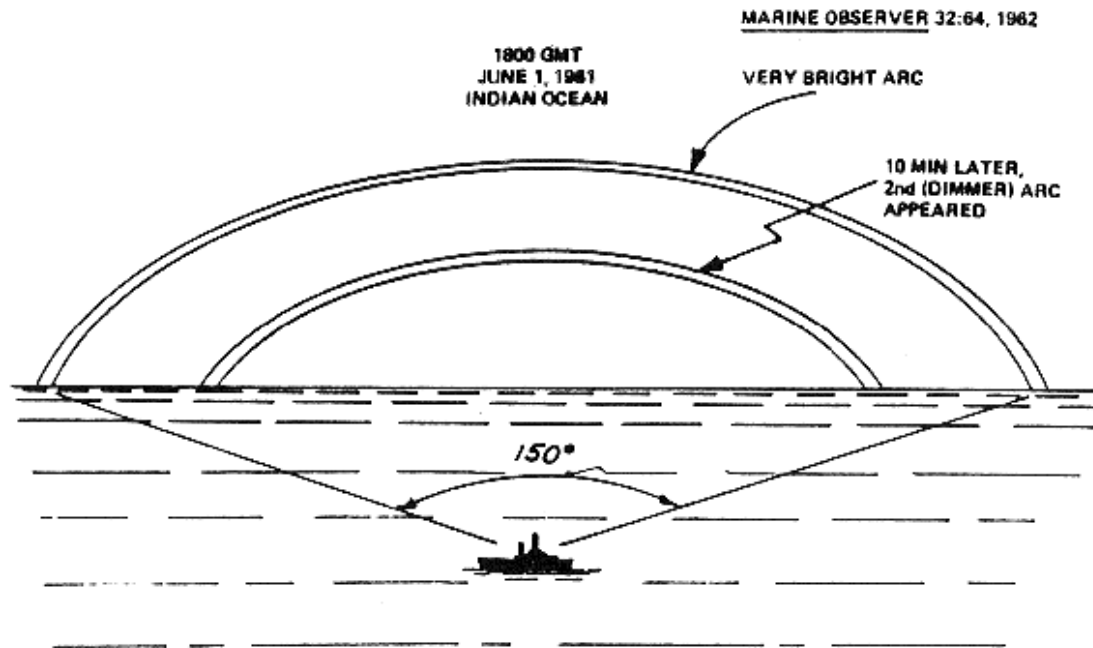
In addition, of course, any ordinary vehicles penetrating all three shields are exposed to successive violent EMP's, and are almost certainly electrically duded. The vehicles are also subjected to multiple periods of intense heating, so combustibles, fuels, explosives, and ablatives are destroyed. In addition, metal structures may be melted or vaporized.

Think of it this way: anything which hits one of these Tesla shields goes phht! just like a bug hitting an electrified bugkiller screen.

For years passing ships have observed and reported such multiple-shield "light phenomena" over remote regions of the ocean. U.S. intelligence has routinely not paid any heed to reports of "lights at night" over remote ocean areas, and so Soviet tests in this manner have remained relatively unnoticed by officialdom~.

TWO ARCS IN THE SKY

SLIDE 61



Just to list one incident involving the testing of multiple concentric Tesla shields, here is an early test conducted in mid-1961 over the Indian Ocean.

The incident occurred at 1800 hrs. Greenwich mean Time (GMT) and was observed by a passing ship. The report is contained in Marine Observer, Vol. 32, 1962, p. 64.

First the ship's crew observed a gigantic, very bright arc of light on the horizon or beyond it, with both ends passing below the line of sight to the horizon. This was in fact probably a large Tesla shield, but of such low intensity that only its intersection arc could clearly be seen. The arc subtended an arc of about 150 degrees across its diameter at the bottom.

After about 10 minutes, a second and dimmer arc appeared, concentrically inside the first one. The ship thus was observing what probably was the nesting of two giant hemispheres (of EM energy) to provide a multiple Tesla shield.

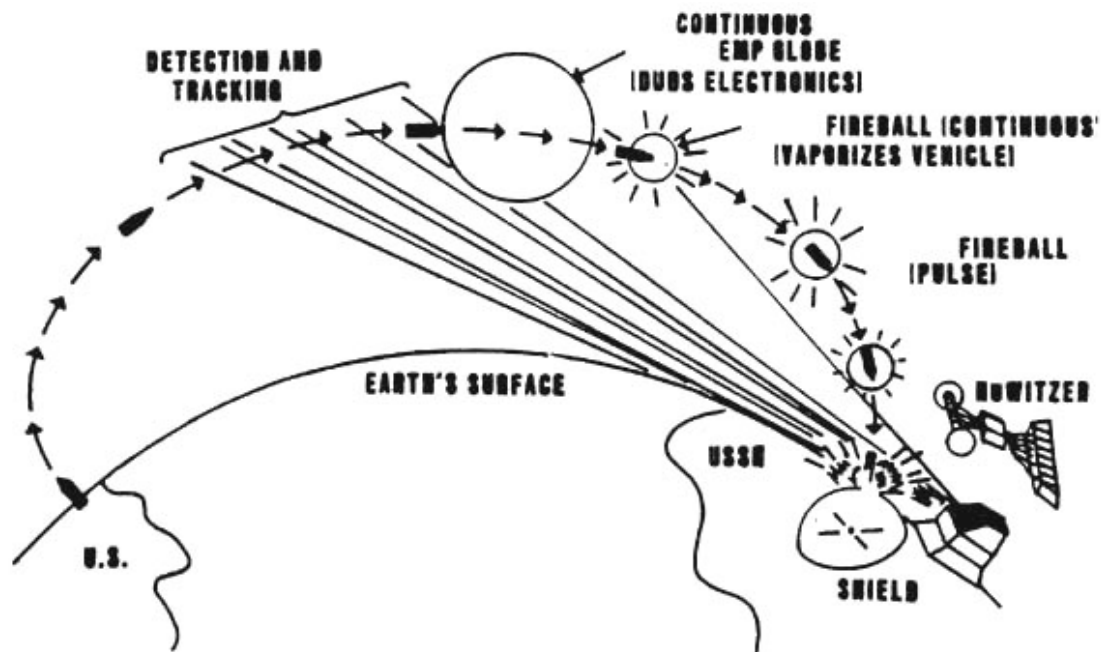
This was probably a test of an early research and development prototype, since Khrushchev had only announced his new "fantastic weaponry" in development in his January, 1960 speech to the Soviet Presidium. And apparently land-based weapons such as this prototype probably did not become deployed and operational until April 1963.

However, even in 1961 the Soviets would have been developing and testing prototypes of the weapon adapted for naval task force protection and usage.

Several other similar phenomena involving nested hemispheres or giant concentric arcs of light have been seen by mariners at sea.

ABM DEFENSES

SLIDE 62



When the various capabilities of Tesla shields, globes, and scalar howitzers are integrated together into an ABM defense, a most formidable Soviet strategic defense capability is apparent.

On this slide we deal only with midcourse and terminal phase ABM defense. Later we shall cover the application of these weapons to launch phase ABM defense, primary phase bomber defense, underwater antisubmarine defense, etc.

Suppose the U.S. is provoked to desperately launch a missile attack toward Russia, as indicated on the slide.

First would come the launch phase destruction of the launched missiles, which we will cover shortly.

Any remaining missiles in midcourse would encounter extremely large, glowing spheres of light, where the EM energy density is contained and held in the spherical shell "energy bottle" of the glowing globes. Each globe might cover an arc of up to about 20 degrees, as seen from the Soviet defended area. missiles carrying MIRV and MARV payloads would not yet have deployed their re-entry vehicles.

As a missile and its payload encounter one of the globular shells, an intense EMP is suddenly experienced throughout the missile and all of its components. Again, EMI shielding is of no consequence since the EMP arises in each increment of spacetime throughout the vehicle volume. The result is instantaneous dudding of all electronic circuitry, including the electronics of the nuclear warheads themselves. The HE content of the nuclear warhead system is violently exploded, totally destroying the configuration of the warhead. A low-order nuclear detonation may occur, but more likely the warhead's nuclear material is just broken up, finely divided, and set afire.

In addition, all combustible materials are set fiercely afire or destroyed. Explosive materials such as booster propellants and HE explosives are violently exploded. Ablative and plastic materials literally explode into pieces, torn apart by sudden violent ablation and outgassing everywhere within. The remnants of the vehicle are now total duds, as is the payload, including re-entry vehicle, nuclear warhead electronics, nuclear materials from the disruption and explosion of the HE portion of the warhead system, etc.

Still, each piece of the debris must pass through the glowing shell once more before it exits. Thus a second "shot", precisely as effective as the first, still awaits each and every piece of the debris plunging along inside the shell as it exits.

As the debris continues on to the latter part of midcourse and early terminal phase, any portions large enough to track are subjected to small, intense Tesla globes where the energy density in the shell is many orders of magnitude greater than in the larger globe used in earlier midcourse. This part of the defense system simply services each incoming "blob" methodically, probably first in the pulse mode. Later, any blobs still remaining are given the maximum "continuous heating" mode with a small Tesla globe, to actually vaporize metals and materials.

In the unlikely event that anything active still remains, or that an object has managed to elude the large and small Tesla fireballs, a Tesla shield is still to be encountered, towering over the protected area. For significant targets this shield will be concentric, and will contain three or more concentric Tesla shields. Again, the approaching vehicle will be subjected to multiple EMP's and severe heating throughout its volume. In addition, the concentric shields will "clean up" and sterilize any gamma radiation and EMP resulting from any deliberate high altitude defense suppression nuclear burst that somehow (inconceivably!) gets through the launch phase ABM system, and the Tesla-globe midcourse and early terminal phase defenses.

As can be seen, the system complex represents a most formidable defense that certainly approaches 100% effectiveness against the present triad, and even against the addition of cruise missiles.

In addition, since these weapons suffer from very strange constraints and limitations, the scalar transmitters are actually dual mode: they become conventional radars by simply switching into the ordinary EM mode. They are part of the more conventional ABM defense system complexes we presently recognize in the Soviet Union. In this conventional role, backup ABM missile interceptors are available, to be employed in case the conventional role must

be assumed.

Later we will address the reason for the strange limitations which must be placed upon unqualified use of the large scalar EM systems, particularly in the pulse or "burst" nodes.

WOODPECKER BEAMS INTERSECT OVER NORTH AMERICA

SLIDE 63

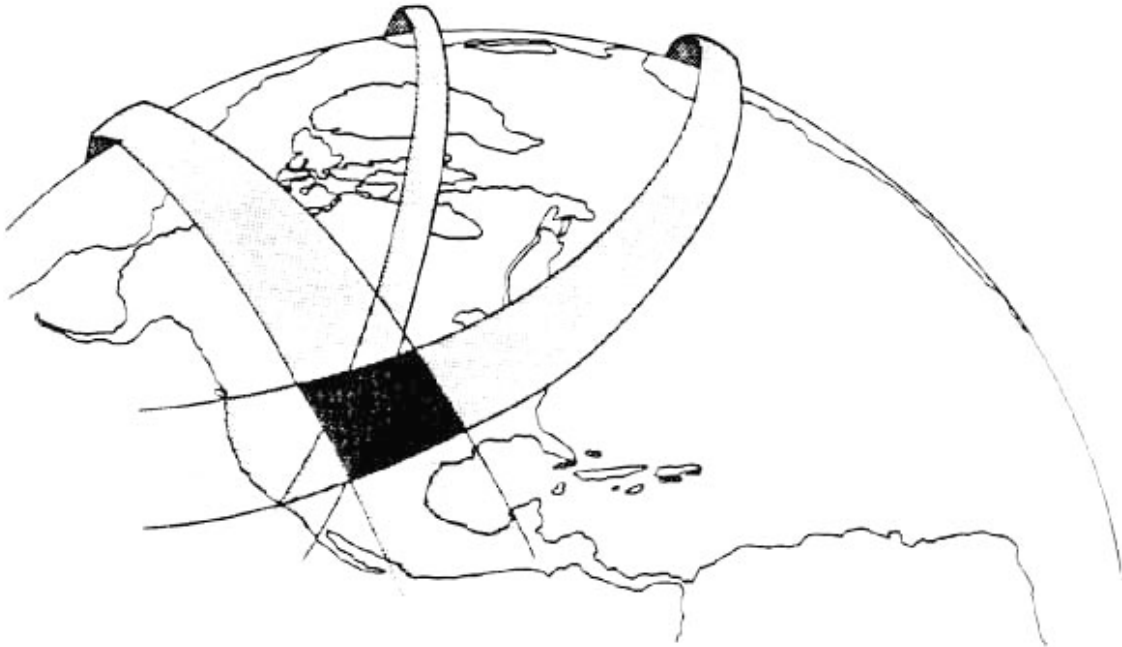


Illustration after *Soviet Military Power*, Department of Defense, 1985, p. 45

In July 1976 the U.S. received very special Bicentennial greetings from the Soviet Union.

At that time, communications systems of the world in the **3-30 megaHertz band** suddenly met substantial interference from extremely powerful, chirped Soviet transmitters which were suddenly activated. These transmitters continue their transmissions to this day.

Estimates of the power of these enormous transmitters vary, but figures range as high as several hundred megawatts, with a nominal figure being 100 megawatts.

These powerful transmitters were promptly nicknamed "**Woodpeckers**" because of the characteristic sound of the chirped signal when received. That is, the received signal made a "pecking" sound much like a woodpecker's beak hitting a block of wood. ([listen below recording](#))

Several nations protested, but the powerful signals have continued, right down to this day. The only Soviet response was to add a "spread spectrum" capability, so that the transmitter did not dwell too long on one specific frequency, but shifted periodically to other frequencies.

These transmitters have apparently never been precisely located by U.S. intelligence, but their beams carry much of the characteristics of an over-the-horizon (OTH) radar. They have been dubbed OTH-radars by U.S. intelligence, and can without question perform that mission, in addition to some very interesting missions which U.S. intelligence does not assess.

Soviet Military Power, Department of Defense, 1985, p. 45 shows the direct intersection over the United States of the Woodpecker radar beams used in an OTH-role. We show an illustration of that intersection on this slide.

In addition, we show an additional "scanner" beam which can be scanned across the intersection "grid" over the U.S., formed by waveform interference of two main Woodpecker beams.

These **Woodpecker** transmitters have a great many diverse functions.

First, they can be used in a conventional over-the-horizon radar mode, since their beams follow the earth-ionosphere waveguide and curve around the earth. In this mode they can detect missiles at launch and thereafter, and strategic bombers when taking off and thereafter.

However, these scalar interference grid weapons have many other uses.

First, they can be used to biologically attack entire populations in a targeted area. This aspect is not covered in this briefing. Suffice it to say that phase-locked ELF modulation signals of 10 Hz and less are often detected on multiple Woodpecker frequencies simultaneously. In a target area, this modulation – if sufficiently stronger than the Schumann resonance of the earth's magnetic field – will entrain a percentage of the brains into "forced entrainment." In that case, these human brains are "synchronized" to the Woodpecker signals so that multiple coherent frequencies are phase-locked into them. That is, multiple coherent EM channels directly into these entrained brains now exist. At that point, Fourier expansions may be used to attack specific portions of the brain geometrically.

In addition, **scalar EM disease patterns** can be modulated upon the carriers, again with Fourier expansions. Specific biological effects can be induced in the entrained populace at will, limited only by the state of the art of the Soviet technology used to attack them. Possible induced effects include instantaneous death, heart seizure, severe emotional disruption, loss of control of internal functions, diseases, disabling of the immune system, and even implantation of thoughts, emotions, and ideas which are interpreted by the targeted subjects as their own.

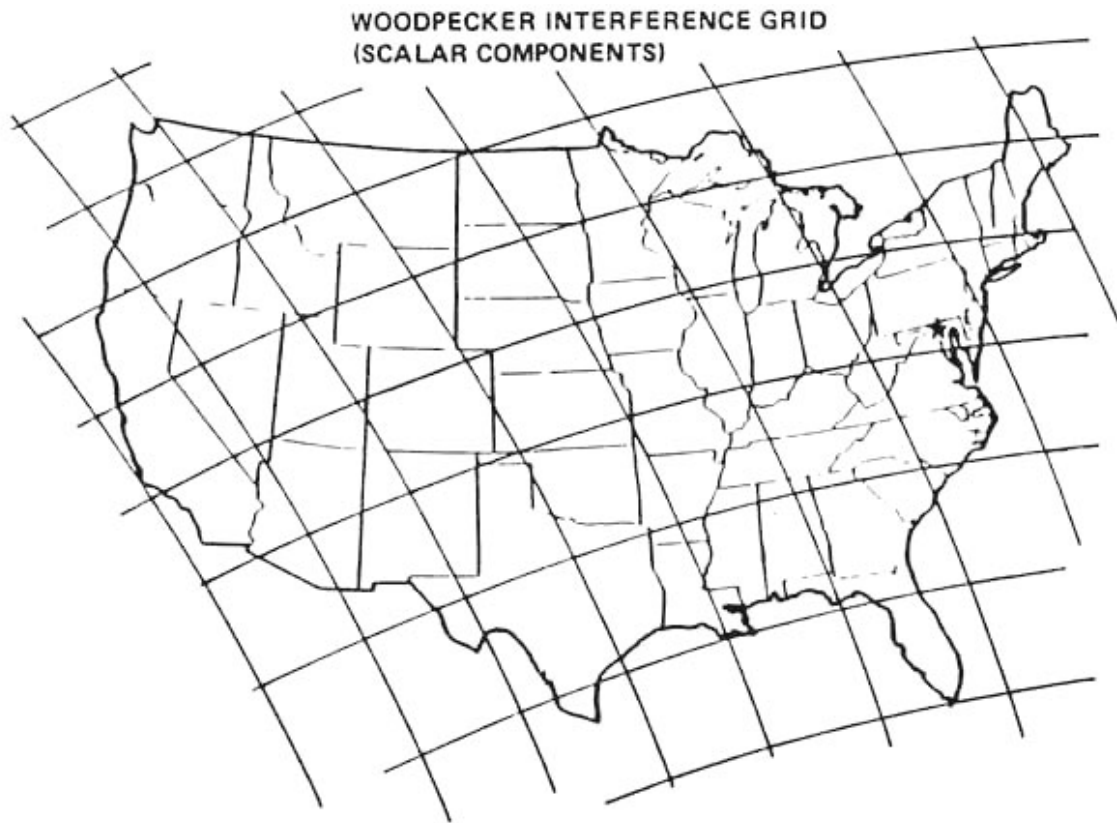
While further discussion of this area is beyond the scope of this briefing, the biological aspects of the Woodpecker transmitters are horrible. It suffices to say that, in thousands of experiments, **Kaznachev** demonstrated that almost any kind of cellular death and disease pattern could be electromagnetically transmitted. Kaznachev reported the effect in the near ultraviolet. Experimenters at the University of Marburg in West Germany duplicated the experiments in the infrared.

The bottom line is that photons themselves can carry death and disease patterns between cells. **Scalar EM technology** allows the synthesis of the actual potential pattern (which after all represents total control of charge and charge distribution, hence biochemistry in the cell) of a particular cellular disease or death mechanism. Symptoms (and cellular death from them!) of nuclear radiation, chemical poisoning, bacterial infection, and other mechanisms were successfully induced by the Kaznachev experiments.

Dr. Popp of West Germany has published an analysis of the virtual photon master control system of the cells. Since scalar EM represents the deliberate ordering of virtual particle flux into deterministic patterns, the master control system can readily be entered with scalar techniques to induce disease and disorder at will.

NETWORK OF VIRTUAL TRANSMITTERS.

SLIDE 64



On this slide we diagrammatically represent the Soviet woodpecker interference grid over the U.S. This grid can easily be used to influence and control the weather, and for over a decade the Soviets have manipulated the weather over the U.S. and other parts of the world.

By the peculiar title of this slide, we wish to call attention to the fact that, in the exothermic mode of scalar interferometry riding on the woodpecker radar signals, each of the woodpecker grid interference cells can act as a little "virtual transmitter." It's exactly as if the Soviets had been permitted to enter the U.S. and build thousands of EM transmitters at regular intervals all over the country!

And of course it's even worse. In the endothermic mode, it's as if the Soviets had been permitted to enter the U.S. and build thousands of "cold generators" all over the U.S. That is, in that mode, each of the "transmitters" can actually extract electromagnetic energy.

These two modes have enabled the Soviet Union to drastically manipulate the weather at will over the U.S. during the last decade (and similarly, for other places as well.)

(For a full disclosure of the Soviet weather control operations over the U.S., see T. E. Bearden, Soviet Weather Engineering Over North America, 1-hr. videotape, 1955, available from POB 1472, Huntsville, Alabama 35807, \$40.00 U.S. postpaid, VHS or BETA format. We will only summarize here.)

Briefly, inside various reference level zeros on the ordinary EM woodpecker carriers, scalar "channels" are established. Scalar beams, signals, and interferometer pulses and transmissions can be transmitted through these reference channels as if directly through a wire. Phasing, pulse shaping, and Fourier expansion formation of geometric forms are then the key to be used in scalar interferometry through the internal scalar channels of the Soviet woodpecker signals.

By choosing one or more grid cells and using scalar interference there in the exothermic continuous mode, local heating and expansion of the air, and formation of a high pressure area, occurs.

By choosing one or more grid cells and using scalar interference there in the endothermic continuous mode, local cooling and shrinking of the air, and formation of a low pressure area, occurs.

By electromagnetic "rotation" of the interfering scalar beams, the hotspots and coldspots can be moved along a desired path and at a desired speed.

By these methods the entire jetstream across the U.S. can be deviated and controlled to a large degree. Moisture can be drawn from the Pacific beyond Southern California and Mexico, and collided over the southern U.S. with extremely

cold air brought down from Canada, producing ice storms such as those in and around February 1, 1985.

Violent thunderstorm activity can be induced and directed. By adding "spin", these same storms can be induced to form extensive tornados.

By sustained weather engineering operations, drought or excessive rain and flooding can be induced in areas of the U.S. as desired. Crops can be destroyed or heavily damaged by severe and unseasonal weather.

If the grid is placed in the ground on scalar EM carriers instead of normal EM carriers (and the woodpecker "radars," can switch to, or add, scalar carrier mode whenever they wish), it can be used as an anti-submarine weapon, as we shall see later. It can also be used to cause substantial ocean effects that have drastic consequences on the world's weather -- such as the anomalous El Nino of 1982-83.

By localizing one spot of heating at the top of a thunderstorm anvil, and another spot of cooling at its side, a localized downburst can be created. Our weather satellites have detected just such an anomalous combination heating and cooling of thunderstorm anvils over the U.S. While there may exist natural mechanisms to cause this anomalous dual pattern, it may also be caused by Soviet weather engineering, which can cause either broad-area or highly localized effects.

All these types of weather engineering incidents have been deliberately created over the U.S. by the Soviet Union.

Perhaps the greatest weather effects can be induced by altering some of the large scale normal mechanisms that influence and control our weather. Thus the artificially induced El Nino of 1982-83 was a case in point, causing drastic weather upsets worldwide for a year or more.

The last decade has seen weather so anomalous that it could only occur once in 1200 years by chance. It has not been due to normal chance, but by Soviet weather engineering, particularly since the advent of the Woodpecker transmitter complexes.

ADDITIONAL BACKGROUND FOR THE BRIEFER

The Woodpecker transmitters can carry scalar components which, in addition to biological strikes, can be used for many other purposes such as to

1. influence and control the weather,
2. deviate the giant jetstreams of the upper atmosphere,
3. detect, track and destroy missiles shortly after launch,
4. detect, track and destroy strategic bombers and other aircraft,
5. attack land and ocean surface targets by large aerial electromagnetic explosions: the EM explosion produces the fireball, the thermal effects, and the blast wave of a nuclear explosion without the nuclear radiation and radioactive fallout contamination;
6. attack surface land and ocean targets by large "cold explosions", where living things freeze almost instantly, leaving the surface facilities and equipment intact,
7. attack land and ocean surface targets by severe internal electromagnetic disruption, so that all electronics are duded,
8. attack personnel on land and sea by direct destruction of their nervous systems with an internally induced strong EMP,
9. disrupt the operation of distant facilities, equipment, and personnel or destroy food crops in large areas by severe cold or severe heating, or even startling oscillation between the two.
In addition, the scalar aspects of the Woodpecker transmitters can be beamed through the earth and ocean as surface waves or at a given depth to intersect at a distant region. This mode can be used to
10. cause distant earthquakes in a distant fault zone by depositing energy in the rocks there, increasing the plate stress until slippage occurs at a fault zone,
11. cause large, anomalous rocking of an entire plate or large area, by depositing and extracting energy from alternate areas, causing buckling of the large rock plate,
12. set up an interference grid under the water, so that underwater submarines can be detected, tracked, and

destroyed on station and with their missiles still unfired,

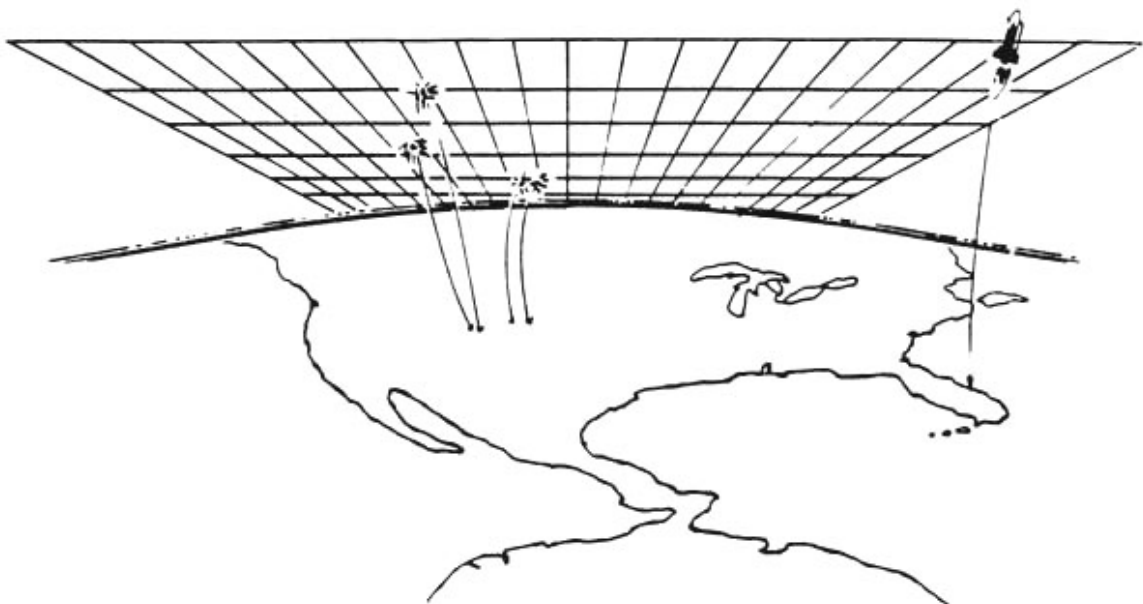
13. attack naval vessels and task forces through the water and through their hulls, without warning,
14. attack missile silos and nuclear storage sites "before launch", directly through the earth itself,
15. initiate the full nuclear explosion of implosion-type nuclear warheads on-board missiles on station,
16. initiate full nuclear explosion of implosion-type nuclear warheads in storage sites and ready reserve,
17. destroy seaborne and ocean-bottom-mounted mines and underwater sensors, even including entire "fields" of them,
18. detect and destroy hostile torpedoes, ship-to-underwater anti-submarine missiles, and dumped anti-submarine munitions and charges,
19. "pump" the electrical grounding of distant electrical power distribution and generation systems so that the system catastrophically fails,
20. "pump" the electrical grounding of distant electrical power systems so that radio and television transmitters, power grids, and wiring complexes in buildings and facilities radiate a desired scalar wave component or signal complex at equipment and personnel.

All in all, the woodpecker transmitter complexes and other associated scalar EM weaponry are most useful in the major missions required in war.

LAUNCH PHASE ABM SYSTEM

SLIDE 65

- **"BIG EYE SCANS GRID SQUARES, DETECTS PENETRATION**
- **COMPUTER TRIGGERS MULTIPLE TRANSMITTERS**
- **PULSES PHASED SO EMP PULSE OCCURS IN DESIRED SQUARE**
- **PENETRANT IS DUDDERED OR DESTROYED**



On this slide we show the use of the Woodpecker grid in the Launch Phase ABM system role.

The scalar components establish an interference grid over the U.S., at some altitude above the earth. One or more separate scalar interferometers transmit through scalar channels established in the Woodpecker's normal EM carriers, scanning through the grid square cells one by one in the "just barely extract energy" endothermic mode. Back in the Soviet Union, the energy extracted passes through a scanned receiver biased just so that the normal energy extracted from the distant atmosphere does not show on a scanning screen. Any substantial amount of additional energy appearing in the cell --such as from the jet engines of a large aircraft or the rocket exhaust of a large missile -- will be detected.

The operation of this weapon is four-fold: (1) the scanning interferometer or "big eye" scans the grid squares, detects penetration, and tracks the rising missile. (2) A separate scalar EM interferometer (a howitzer) is controlled by a computer and fired through a separate scalar EM channel opened in the ordinary EM woodpecker carriers. (3) Two timed scalar pulses are fired so that they converge and meet in the grid cell containing the rising missile. This results in the sudden emergence of a violent EMP pulse throughout the missile and the surrounding vicinity. (4) All missile and warhead electrical and electronic systems are instantly duded and destroyed. In addition, fuels, propellants, and explosives of the missile are immediately ignited, explosively destroying the penetrating missile.

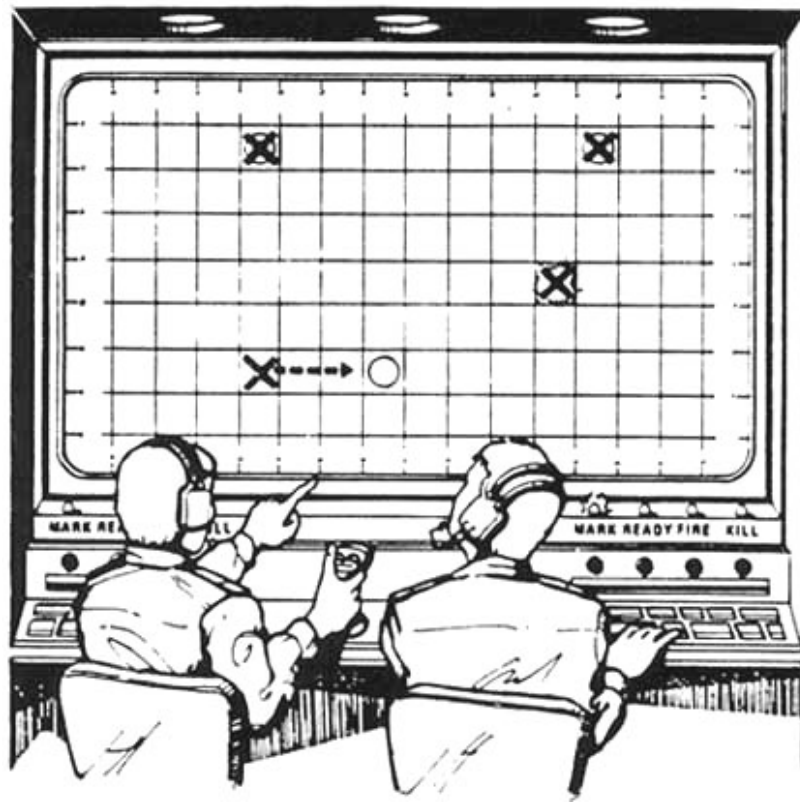
That takes care of the missile target. (The same weapon, of course, can be used against airborne strategic bombers -- including Stealth-type bombers. In fact, Gary Powers' high flying aircraft was probably shot down in 1960 by a "jury-rigged" scalar EM howitzer using modified radars and timed scalar pulses to provide an aerial explosion and EMP.)

The Woodpecker grid/howitzer weapon system can be placed over the ocean and used against cruise missiles, naval surface-to-air and surface-to-surface missiles, submarine-launched ballistic and cruise missiles, etc. Placed over a carrier task force, it can also take care of the aircraft launched by the carrier as fast as they are launched. It can also handily take care of the missiles launched by guided-missile cruisers of the accompanying task force.

Now let's take a look at the command and fire control end of this weapon system, way back in the Soviet Union.

SOVIET COMMAND AND CONTROL CONCEPT

SLIDE 66



On this slide we show a postulated Soviet fire control system for the grid weapon. .

Two or more operators sit at a control console, facing a giant display (screen). The display contains a grid which represents the distant interference grid of the Woodpecker carriers (or scalar EM carriers, if in the underground or underwater mode). A distant missile launched into the real interference grid overhead will cause a spot of light to appear in the appropriate grid square (cell) on the operators' screen. The operators will track the displayed target,

select firing mode and type of action, engage the target, and assess whether or not the distant target is killed or missed by the firing.

When a missile is launched in the distant area over which the Woodpecker grid has been placed, it quickly rises through one of the scanned grid cells on its upward journey. As it penetrates the cell, additional energy is extracted (since part of the missile's exhaust energy is now extracted also). At the screen in the Soviet Union, the additional energy received rises above bias, causing a "bloom" or spot of light to appear on the screen at the appropriate grid cell representation.

The distant operator has now detected the missile launch and its location. He places a marker over the target track and activates the computer, also inputting the type of firing or action to be performed. In this case, let us say he wishes a burst of energy to emerge inside the distant launched missile, and has activated that mode of firing action.

The computer computes the necessary parameters for another scalar interferometer channel in the exothermic mode, and for firing at the location of the rising missile so that two scalar pulses will meet in the cell penetrated by the rising missile on the other side of the earth. As the channel is opened, the firing solution settled, and the interferometer howitzer readied, the computer activates indicators on the console notifying the operator. When all is ready, a "ready-to-fire" light is lit on the console.

Upon receiving the command to fire and destroy the missile, the operator presses the fire button. The computer fires the activated scalar EM howitzer in the pulse mode. The operator continues to watch his screen.

When the pulses meet in the distant grid cell, a violent EMP suddenly arises in and throughout the missile and its surrounding vicinity. This explodes the missile propellants and warheads, destroying the target..

On the distant screen, a sudden drastic "blossoming" of the target results from the sudden extraction of a great deal of additional energy by the scanning scalar interferometer. The operator thus knows he has made a "kill."

Should for some reason the target be missed, additional energy will still be extracted by the scanning interferometer from the grid cell/vicinity in which the EMP suddenly emerges. The distant operator will still see a bloom on his scope, but not nearly so great as when the missile explodes. He thus knows that the EMP effect of the firing has occurred, but the target has been missed (he will see the bloom in its offset location as well). In that case, the operator can quickly mark the EMP location, hit the switch, and the computer will automatically correct and fire again.

At any rate, for a miss a large "sonic boom" or blast still results in the EMP emergence zone from sudden heating of the air. These are precisely the type of booms that were associated with three NASA shuttle launches prior to the end of 1985. These were actual testing of this weapon system, using the shuttle launches to provide a target, and delaying the burst some minutes so the shuttle would not actually be destroyed. On Nov. 26, 1985 a "marker beacon" (glowing ball of light) was also created over the site. This was probably to orient satellites and other detection systems. Some 12 minutes after that nighttime launch, a large blast occurred over the site, heard for hundreds of miles up and down the coast. Shortly after, the light suddenly moved away very rapidly – faster than a jet aircraft.

If many missiles are being launched, the operator marks them rapidly, one after the other, and the howitzer fires burst after burst at them, decimating the launched missiles, one after the other. In this fashion most of the counterstrike missiles launched by the U.S. would be destroyed shortly after launch, greatly reducing the number of missiles which make it to midcourse.

However, apparently the loss of the shuttle launched on Jan. 28, 1986 was caused by the addition of a metal-softening pattern in the exothermic mode, in and around the booster, using the actual booster ionic flames as a receiver-amplifier. This led to the failure of one of the supports and the partial breakaway of the right booster. The booster rotated into the tank, causing damage and the resulting explosion when the venting main fuel hit the booster flame.

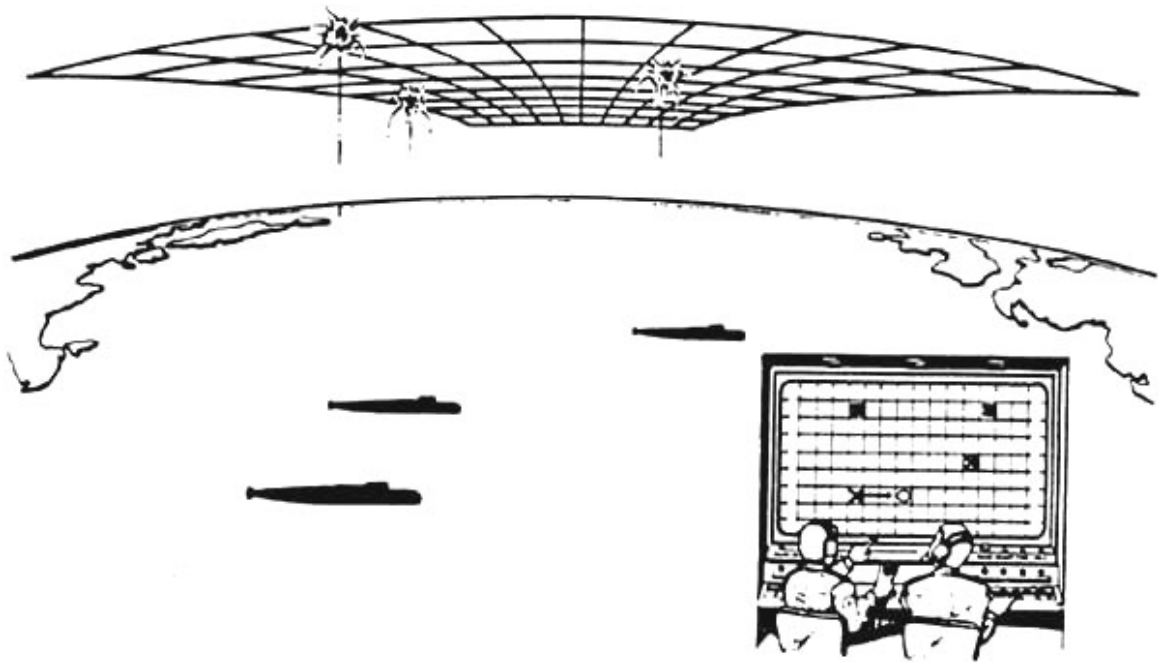
By spread spectrum techniques and proper timing and phasing, one system of Woodpecker transmitters can set up multiple interference grids, in various parts of the world. The scanners and howitzers can operate in the appropriate zones, again by spread spectrum techniques and proper timing and phasing.

In fact, the latest versions probably can operate in the "ordinary EM carrier" (atmospheric) mode and the "scalar EM carrier" (underwater and in the earth) mode simultaneously – again by timed switching between EM and scalar EM carriers, spread spectrum techniques, and timing and phasing of howitzers and scanners.

Thus a single system can operate in the earth, underwater, and atmospheric modes. It can operate against the very wide range of different targets previously mentioned. It can do all this "simultaneously," from a real-time practical viewpoint.

LAUNCH PHASE ABM SYSTEM (ANTI-SLBM)

SLIDE 67



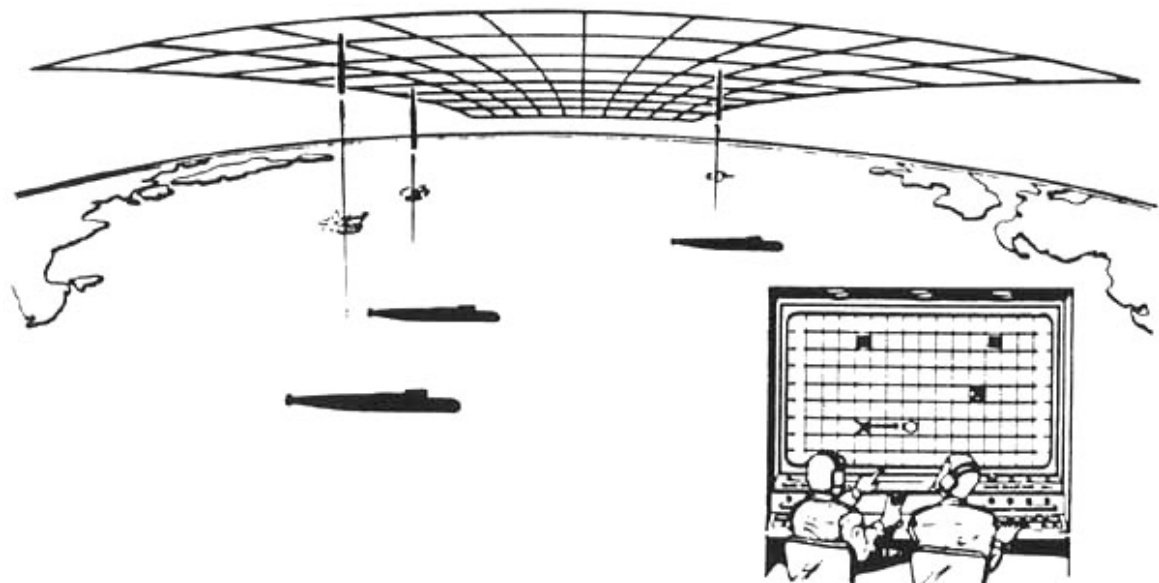
Here we show the operation of the system in the atmosphere over the ocean, to destroy sub-launched ballistic missiles such as Poseidon and Polaris. The system operation shown uses the normal EM Woodpecker carrier frequencies, with scalar components to establish the interference grid, and scalar channels for the scanners and howitzers. The grid can be set up by this method anywhere in the world.

As can be seen, during their early launch phase, this mode will take care of the missiles launched from underwater U.S., British, and French nuclear submarines.

Remember, this is just one mode in which the system is operating. It can at the same time have other interference grids at other locations, and even in other modes, including underwater grids used against the submarines themselves. It can be engaging a multitude of targets of a wide variety of types, essentially all simultaneously.

DETECTING AND MARKING MISSILE LAUNCH

SLIDE 68



Here we show the missiles launched from the underwater submarines, when just detected in the atmosphere over the ocean. As each rising missile is detected, an operator at the screen places a cursor (a "marker") over the detected track spot on the scope.

The computer quickly computes the firing parameters and indicates when the system is "ready to fire."

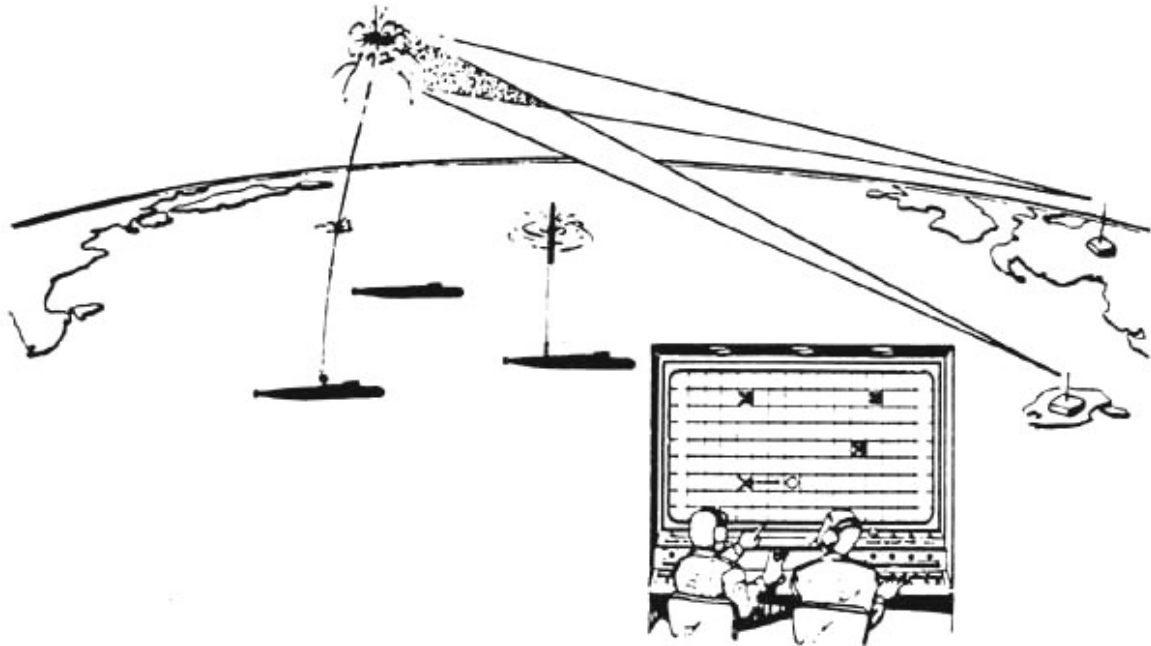
By using additional scalar scanner frequencies in the multi-gigaHertz range and fine-scanning, the operator is able to accomplish non-cooperative target identification.

After the operator places a cursor over a target, the advanced system fine-scans and identifies it as hostile, then continues the track in automatic.

When the operator presses the fire button for a designated target, the computer initiates fire by the appropriate scalar EM howitzer through established grid scalar firing channels.

DESTROYING THE LAUNCHED MISSILES

SLIDE 69



On this slide we temporarily omit the interference grid and diagrammatically show the operation of the scalar EM howitzer.

As shown, two pulses are fired so that they meet in the grid cell where the rising missile is located. A drastic EM pulse suddenly emerges everywhere throughout the missile and its vicinity causing instant missile destruction.

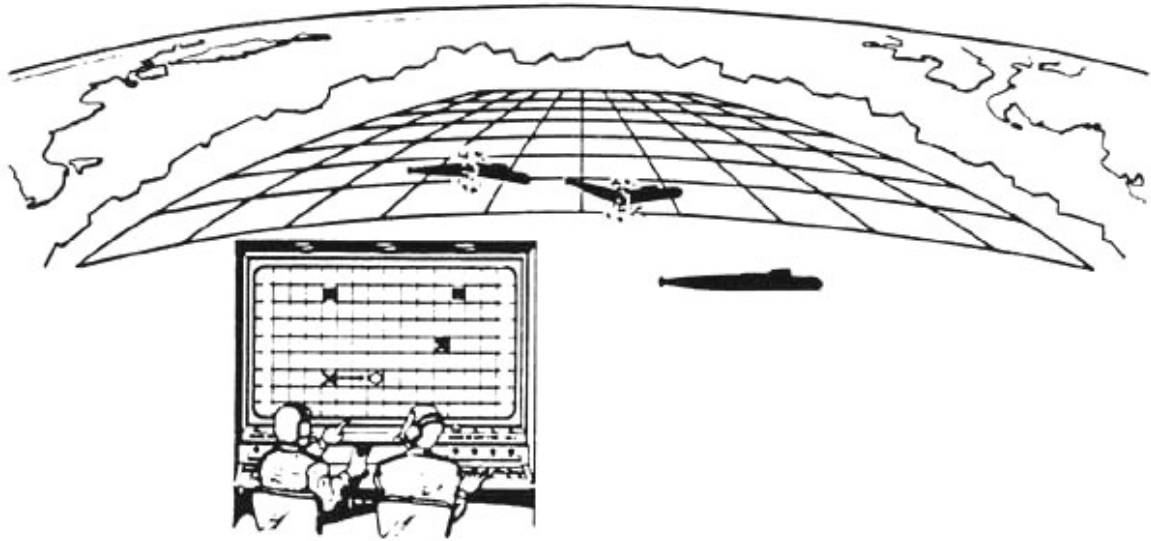
Of course, individual howitzers not in the Woodpecker carrier's scalar channel can also fire at the missiles in the purely scalar exothermic mode. Or they can utilize the large "Tesla globe" in the continuous mode, the small Tesla "ball of light" in the continuous or pulsed mode, etc.

Also, continuous EM energy can be caused to emerge in a broader, "defocused" interference area causing electronic dudding of circuits in vehicles over a wider area. This is a very useful mode to use against mass attacks by many aircraft and/or many missiles at the same time. That is, the entire formation can be attacked in the "dud electronics" mode, and then followed up by more intense servicing of each individual hapless target.

Again, in 1960 Gary Powers was probably downed by a crude prototype scalar interferometer "howitzer" obtained by modifying two ordinary radars. At least the Soviets had previously been unable to down a penetrating U-2 with missiles they possessed. We know the scalar howitzers were in development, for Khrushchev had announced to the Presidium in January, 1960 that a new "fantastic weapon" was in development. A development prototype was probably used to down Powers' aircraft.

SHIFT TO ANTI-SUB MODE (UNDERWATER)

SLIDE 70



In the underwater mode portrayed on this slide, the Woodpecker transmitters have been switched to "scalar carriers" mode and the carrier beams transmitted through the ground and into the ocean underwater. (Remember, an artificial EM potential that does not couple to charged particles or ions will travel through the ocean, but a force field will not.)

Thus a giant scalar interference grid is now established underwater. This grid is scanned by additional scalar beams in the weakly endothermic mode. When a submarine enters the grid, it substantially changes the potential in that cell, and the scanner picks this up. The distant screen now displays the sub as a "track" of light in the appropriate grid square cell. The computer switches in fine-scanning and non-cooperative target identification. It identifies the target as hostile and alerts the operator (by blinking the track and changing its color to red, for example).

As before, the operator marks the target and enters the firing mode and type of action desired. Again, let us assume the "EMP burst" mode of destruction is to be used. The computer computes the firing parameters and readies the howitzer. When the commander gives the command to fire, the operator presses the firing button. The computer fires the howitzer.

Two scalar pulses proceed through the howitzer scalar channel and meet in the submarine. Throughout the sub and its vicinity, a violent EMP is suddenly experienced, knocking out the electrical systems, electronic equipment, and igniting propellants and explosives in the on-board missiles and armament. This explodes the submarine, missiles, and torpedoes instantly.

At the distant command console, the violent eruption of energy from the exploding submarine is detected by the scanners. It appears on the screen as a sudden strong blossoming of the track. The operator assesses that the target has been destroyed. He immediately engages another target if one is present.

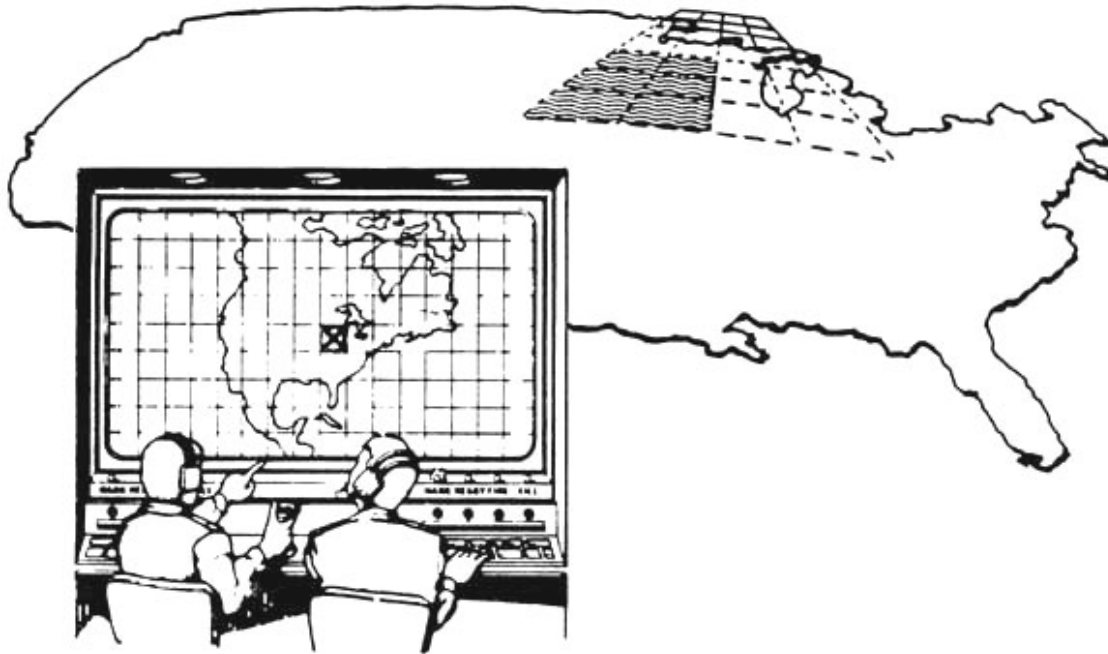
If the EMP is off-course and misses, the scanners still pick up a smaller blossoming in the offset location. The operator immediately knows he has missed the target. He marks the offset bloom, presses the switch for "Correct!" and the computer makes the firing correction. When the operator again gets a Ready-to-Fire light illuminated, he presses the firing button and fires again at the target, this time with corrections applied.

Again, the same Woodpecker system -- using timing, phasing, scalar/EM switching and spread-spectrum techniques -- may be involved in several grids and many types of targets. When in a target-rich environment, the firing operators may be very busy indeed.

As we shall later see, the same weapon system may also be firing in the "cold explosion" or pulsed endothermic mode, where intense bursts of instant and severe freezing are unleashed in the target zone.

SHIFTING TO EARTHQUAKE MODE

SLIDE 71



The uses of the complex grid, scanners, and scalar howitzers is limited only by human ingenuity and state-of-the-art of the technology developed.

By shifting to the scalar-carrier mode and transmitting in the surface layer of the earth, the interference zone can be established in a distant region of the earth, beneath the earth's surface.

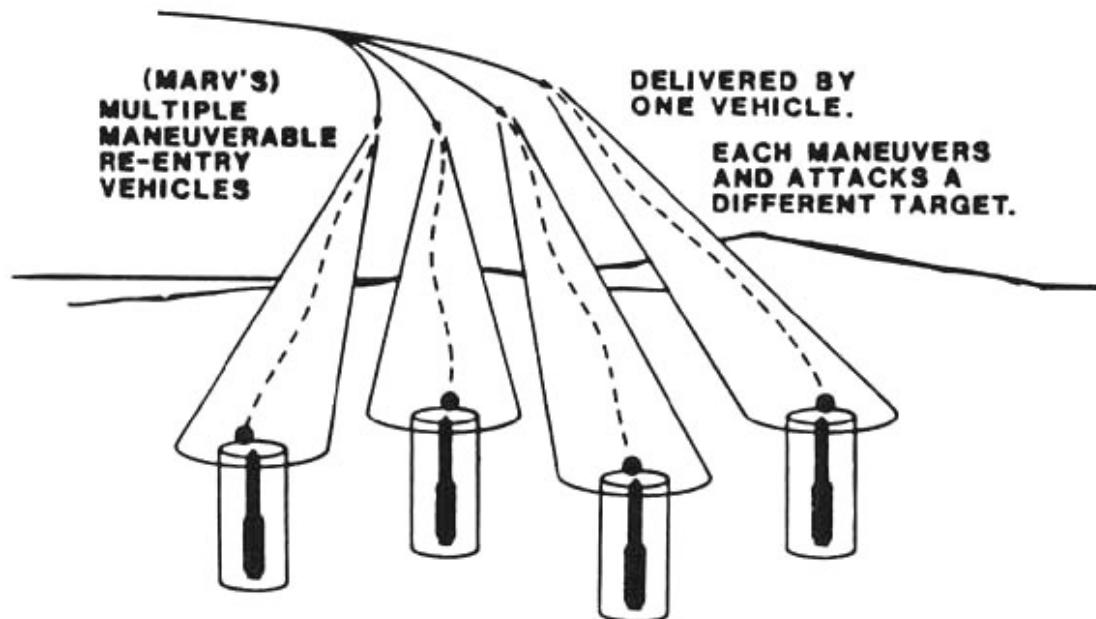
Suppose we establish a very small interference grid in the earth at and around a distant fault zone. Then by steadily depositing energy in the zone in the continuous exothermic mode, the stress in the fault area is steadily and gradually increased. Eventually the plates on each side of the fault will slip, and a "natural appearing earthquake" occurs. If the energy is deposited slowly and gently, a gentler quake can usually be effected. If the energy is deposited fairly rapidly, a higher peak stress can usually be reached before the rocks slip, and a larger, more destructive earthquake results.

By making a wider grid in the earth in a larger area, a strange kind of earthquake can be induced, whether or not a fault zone exists in the area. By pouring energy out of alternate cells and extracting energy from the others, a "wave-like" buckling tensile and compressive stress is created throughout the zone. As this continues, the entire plate area will try to oscillate, moving and causing an anomalous sort of "rocking, flat earthquake" throughout a large area.

Not too many days after the destruction of the Challenger on January 28, 1986, such an anomalous "flat earthquake" occurred in the U.S., near the Great Lakes, involving some 10 states. This was probably the subsequent testing of an additional weapons mode of the same Soviet scalar EM system that destroyed the shuttle.

SUPPRESSION ATTACK - MARV'S (WITHOUT DEFENSES)

SLIDE 72



Now to shift the emphasis a bit, and look at the impact on some "normal" strategic systems and concepts.

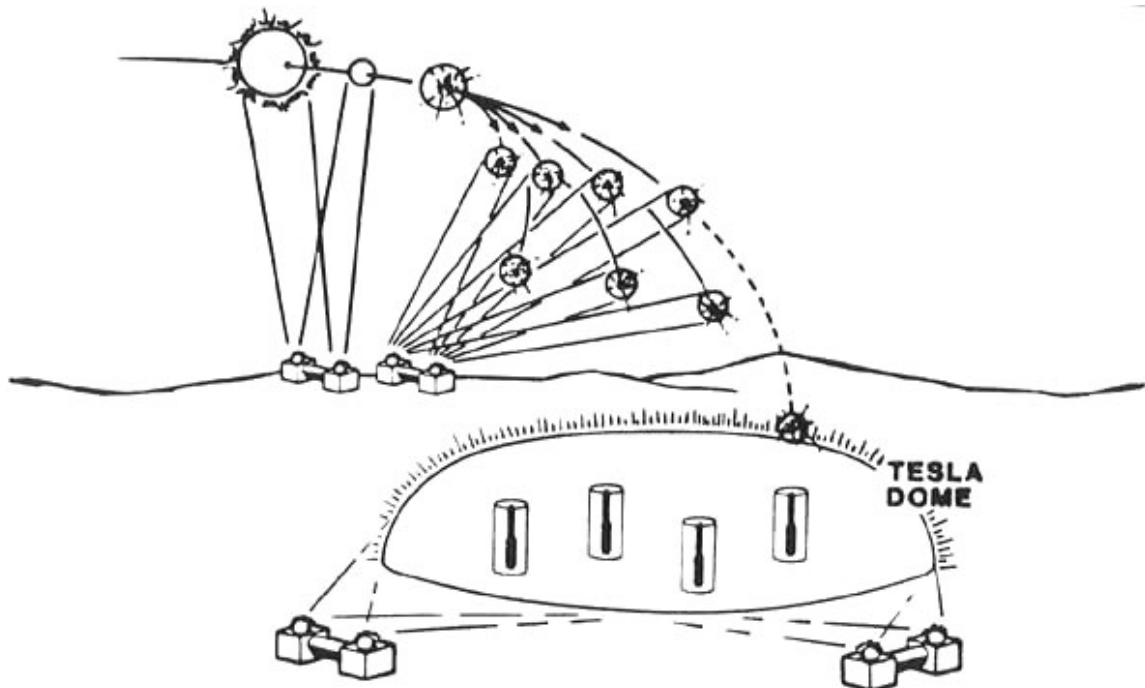
On this slide we show the basic idea of suppression attack against an enemy's ground-based missile force in fixed-site silos. The attack uses multiple maneuverable re-entry vehicles (MARVs) delivered by a single carrier missile which acts as a "bus." The bus ejects the MARVs at the appropriate time, and each of the MARVs heads toward its predesignated target, maneuvering as it re-enters the atmosphere and proceeds to the target. The maneuver makes conventional intercept of the MARV by conventional anti-ballistic missiles more difficult.

In this manner, missile silos without defenses may be caught by surprise and destroyed.

The "bus" concept actually multiplies the number of targets a single launched missile can attack, and the maneuvering of the MARV increases the difficulty of defending the target area by orthodox means.

SUPPRESSION ATTACK MARV'S (WITH DEFENSES)

SLIDE 73



Now suppose some of the scalar EM defenses we have discussed are added to the picture.

On this slide we show a similar missile field, defended by a Tesla dome and by multiple scalar howitzers.

The howitzers take the incoming buses under attack during the early midcourse phase, by means of very large spherical EMP globes. Many of the buses -- and their entire payloads, including the nuclear warheads themselves -- are duded by these midcourse defenses.

Servicing of duded vehicles that have penetrated the globe now occurs farther along in midcourse. Each dud vehicle may be serviced, for example, with a small globe in the continuous mode for an appreciable number of seconds. This causes vaporization or fusing of the physical structures of the vehicles.

Groupings of incoming vehicles may also be serviced by medium-sized globes in the pulse mode. This assures dudding, and is especially useful for clearing away chaff and debris with smaller ballistic coefficients. It also is useful to further insure that the nuclear warheads themselves are totally duded.

An additional wrinkle is to place scalar signal patterns -- that affect and transmute a nuclear warhead's radioactive nuclei -- onto a continuous globe. In short, by the proper scalar signals it is possible to transmute plutonium and uranium into harmless elements, and it can be done at a distance. The 4th and 5th generation Soviet scalar EM technology is probably capable of doing this. This insures that, not only are the incoming nuclear warheads electromagnetically inert, but they are also nuclearly inert and incapable of generating nuclear explosions.

Still another wrinkle -- particularly useful against implosion-type weapons -- is to utilize a scalar signal pattern that causes sudden generation of neutrons in the active material (plutonium or uranium). This harmlessly explodes the nuclear

warheads while they are far away from their intended targets and out in space. The burst mode is probably the most useful for this tactic.

Note that, if desired, this same tactic -- exploding the nuclear weapons themselves -- can also be utilized in the Launch Phase ABM system grid against the missiles after launch. This capability converts an adversary's intended nuclear attack against you to an actual attack against himself!

Also note that the adapted grid system in the surface of the earth can be used to explode the nuclear warheads in ICBMs while they are still in the silos, or to explode nuclear warheads in storage. In the underwater mode, the nuclear warheads in the Poseidon and Polaris missiles on-board the nuclear submarines can be exploded in a similar manner. In fact, the nuclear reactor used to furnish the power for the nuclear submarines can also be exploded or disabled in this manner, as can land-based and ship-based reactors.

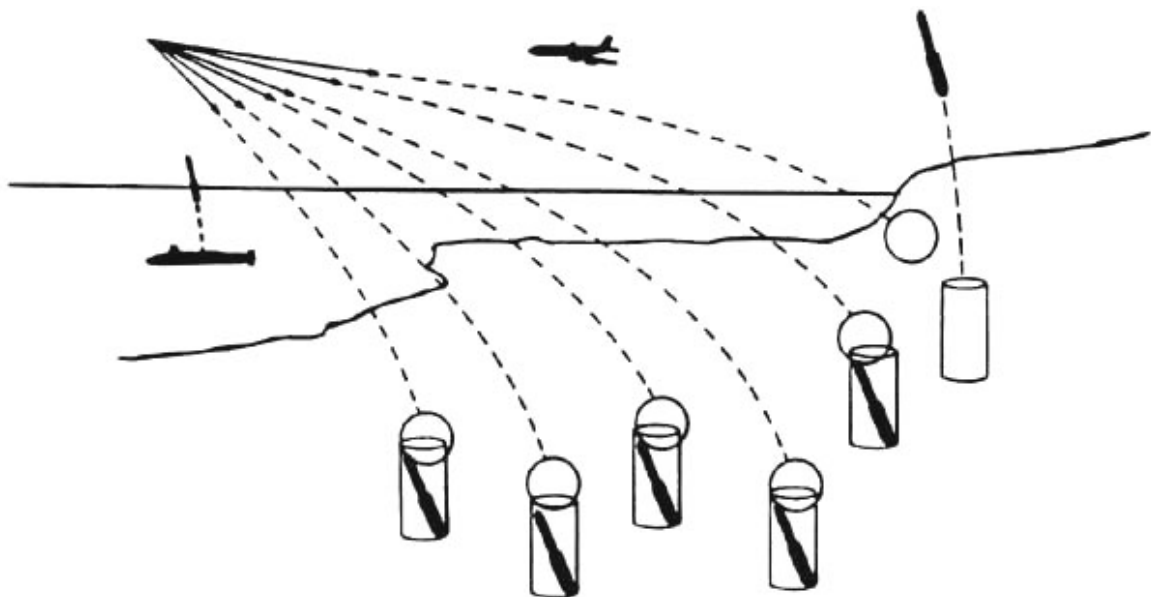
Again, this actually turns an adversary's own nuclear weapons against him. His own weapons can be used to obliterate him. Without scalar defenses, possessing the capability of nuclear attack becomes a serious detriment!

But back to our slide. Just in case something gets through this formidable defense somehow, the Tesla Shield (dome) provides the final reiteration that takes care of any residue "leakage."

The sum total of these defenses fully justifies the 1968 Soviet statement in Military Strategy that the USSR has achieved a 100% defense, and the West has not.

RESPONSE TO COUNTERFORCE STRIKE WITH NO DEFENSE

SLIDE 74



Here we show the orthodox concept of response to a surprise counterforce nuclear strike when the surprised force has no defenses.

A great percentage of the attacked missile silos are destroyed. The surprised side thus is able to mount only a limited strike in retaliation. Perhaps he is able to launch some remaining silo-based missiles that escaped destruction. He is also able to launch missiles from any of his underwater nuclear submarines that escaped. Some of his strategic bombers may have escaped destruction on the ground or while airborne on station; these surviving bombers can be directed to proceed with strategic reprisal against the enemy.

As can be appreciated, this entire concept is now totally obsoleted by the Soviet possession of scalar EM weapons.

The "mutual assured destruction" capability -- or MAD concept as it was so aptly named! -- is no longer mutual. And for two reasons: (1) the Soviet surprise attack could destroy essentially all our Triad forces wherever they are, in the first attack. (2) Even if a very small number of our strategic forces survive, the puny strike we could attempt to launch could be repeatedly decimated from launch to terminal phase.

The restraint on the Soviets is not because of our Triad forces. The restraint is twofold: (1) a second nation has scalar EM weapons, and would undoubtedly unleash them upon the Soviet Union with great violence if such a massive world-wide destruction of U.S. forces occurred or was threatened (is it really "accidental" that six major Soviet missile ammunition storage sites mysteriously exploded within seven months?); (2) the closed-loop scalar radiation exchange system of Earth-Sun could be inadvertently "tweaked" in the feedback loop from Earth to Sun, so that a large solar scalar resonance was stimulated. In that case the Sun could emit a mighty resonant "burp" that would simply wipe out all life on Earth in a fiery shower.

The "terror" in the "balance of terror" between nations has just increased by many, many orders of magnitude.

The biblical prophecy that the Earth will be wiped out by "fire and brimstone from heaven" is very near fulfillment now.

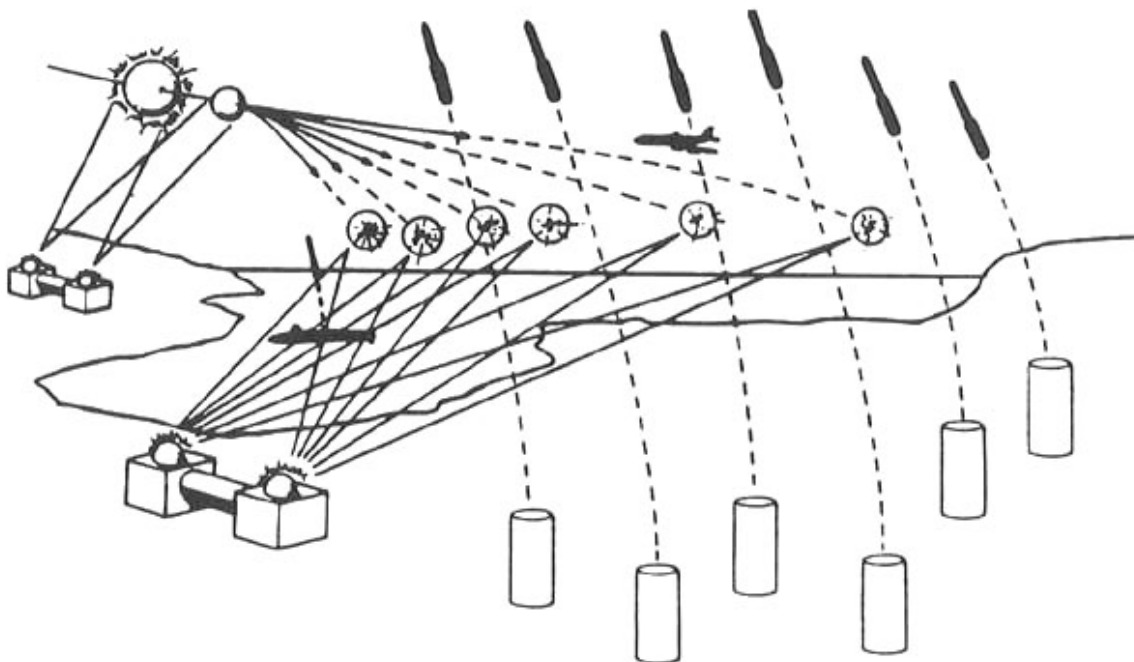
Put another way, the pucker factor -- even on the Russians who may contemplate unleashing Armageddon -- is higher than any Western strategic analyst has ever imagined, even in his wildest nightmares.

Truly these weapons are "more frightening than the mind of man has imagined," as Brezhnev put it in 1975.

The frightening scalar EM weapons can be used, but only very, very gingerly indeed. If a slight mistake is made, everybody loses everything.

RESPONSE TO COUNTERFORCE STRIKE (WITH DEFENSE)

SLIDE 75



On this slide we show the impact of scalar defenses against an adversary who possesses only the orthodox nuclear weapons and delivery systems, and makes a "first strike" by surprise against his opponent.

In this case, the attacked opponent has scalar EM defenses.

With just the midcourse and terminal scalar EM howitzer defenses, almost all of the attacking missiles and re-entry vehicles are destroyed.

If for some reason (such as to prevent triggering the sun and destroying the world inadvertently!) the attacked adversary does not wish to attack strategically with scalar EM weapons, he may now launch a massive retaliatory strike on his opponent.

And if that opponent has no ABM defenses, he's just bought the farm.

What a funny coincidence! Long ago, we crazy Americans chose to put all our eggs in the offensive basket. That is, we thought the Soviets cannot dare to strike us because we will have enough surviving missiles to penetrate any orthodox defense and destroy them in return. They would also have the same "mutual assured destruction (MAD)" capability, of course!

The MAD concept was aptly acronymmed – it was an insane idea from its inception. That is, the Soviets were not supposed to defend their cities and populace, and neither were we. That way, you see, we could destroy their citizenry at will, and they could destroy ours at will. We deliberately agreed to that, thinking – in our insanity – that the Soviets agreed also.

Of course the Soviets weren't playing the same lunatic's game at all. They simply fed our own garbage back to us, and we importantly thought we were negotiating something. Unknown to us, they were secretly building and deploying scalar EM defenses even then. Since we didn't know of any other defense, we assumed the Soviets could not defend their citizenry with ABMs any better than we could defend ours with ABMs. So we blithely scrapped our ABMs.

The high government officials of the United States of America grossly violated our constitution and their sworn oaths of office. Our constitution specifically charges the government of the United States to defend the people of the United States. That means our officials are specifically charged with defending our people. Yet they deliberately agreed not to do so, and they deliberately sacrificed us in advance.

They committed treason of the highest kind, by deliberately surrendering us to total destruction anytime the big balloon goes up.

The constitution doesn't charge the government with surrendering our citizens to destruction under any circumstances. It charges the government with defending us against destruction.

Ronald Reagan is the first U.S. president in some time to see through the MAD concept. At least he stands forthrightly for defense. It's just a shame that the government and scientific leaders under him aren't aware of the Soviet scalar weapon developments, so they could brief him on these startling developments.

Be sure you understand what the government leaders before Reagan have been saying. For years, our official policy has effectively said to the Russians: "We will allow each side a token defense only. We deliberately will not defend ourselves, so that anytime you decide to strike us you can destroy us. In return, however, we do not think you will want to strike us, for we believe that – before we become ashes from that strike – we can get enough away at you, to destroy you as well. Of course we believe you are in the same sort of boat."

Then we said, "There! That's settled! What a relief! nobody can strike anybody anymore. Now can we talk about partial disarmament and on-site inspection?"

The Soviets just kept their astonished amusement to themselves and kept building scalar defenses (and scalar offenses as well !). Their deception plan called for imbedding the scalar EM weapons in ordinary systems when possible, and hiding the scalar EM weapons tests in ordinary weapons tests when possible. Of course they had to be adamant in their opposition to on-site inspection; after all, even Western scientists, if allowed on site with the dual-mode weapons, might suspect something was different and possibly things were amiss.

The Soviet deception has worked like a charm. The U.S. MADmen who created and implemented the MAD doctrine have succeeded in prejudicing two generations of academicians and elected U.S. leaders against the need for effective defense. A vast wasteland of inane paper studies – learnedly dealing with ABM's, penetration tactics, leakage, force and counterforce, radar blackout, electronic warfare, etc. etc. – has been churned out by our military, industrial, and university "think tanks" to clog the minds, efforts, and literature of our defense and governmental establishments.

Our homeland has no effective ABM defense (and very little defense against aircraft or subsonic cruise missiles). Our field army has no effective ABM defense (or air defense). Our naval forces have no effective ABM defense (although they are better defended against air attack than the field army). Yet ballistic missiles – and to some extent cruise missiles – have supposedly been our greatest threat for decades, followed closely by the secondary threat of massed aircraft attack.

A cynic might take the stand that, if our Defense Department hasn't been allowed to defend us (with deployed weapon systems, not by "paper studies") against what we ourselves have proclaimed is our biggest threat, then why is it called the Defense Department? Why not call it the No-defense Department?

Understand, a great many fine, hard-working people in DoD have certainly tried to get adequate defenses developed and deployed. The sheer weight of the bureaucracy and its mind-numbing entanglements have prevented it.

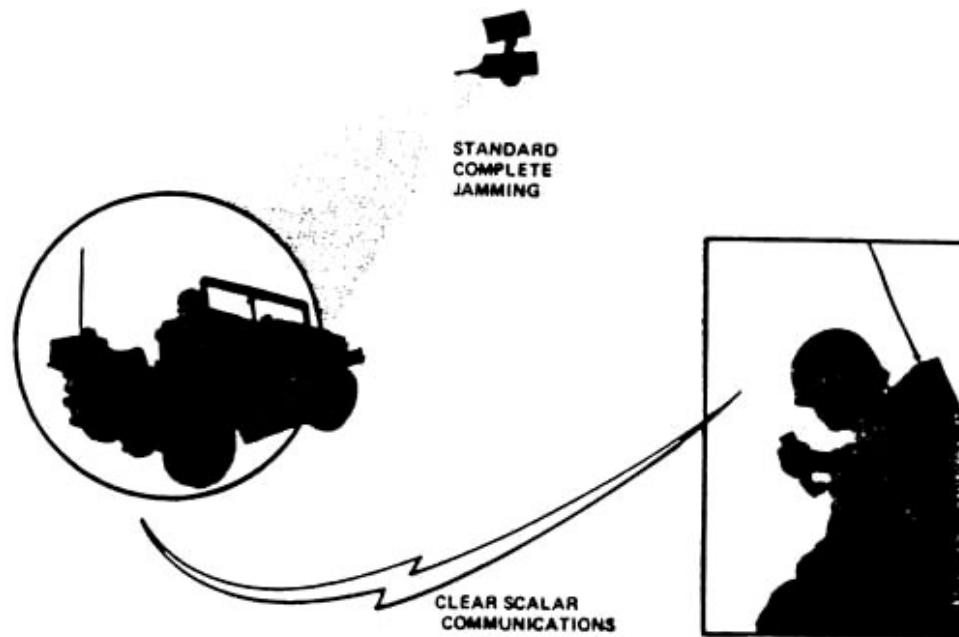
But it's even worse. Our bureaucrats – both in government and in "big, organized science" – have been so caught up in the "Russians are really just ignorant peasants" syndrome and the "not-invented-here" (NIH) syndrome that they've not recognized the greatest scientific and technical breakthrough in history. Such a breakthrough – far greater in importance than the nuclear bomb – has been made, developed, and deployed by the Soviet Union, all in secrecy and behind the smokescreen of a masterful deception plan.

We've totally missed the most incredible "secret superweapons" development program of all times, and the worldwide testing of the weapons themselves.

Hiroshima and Nagasaki should serve as object lessons in the price of ignorance of such technological breakthroughs.

History does repeat itself. But this time it's not we Americans who got the great new superweapon first.

CLEAR COMMUNICATIONS

SLIDE 76

Now let us rapidly give some unique capabilities that one can do with scalar EM in smaller things. Not only can scalar EM weapons be used in the big "continent busting" strategic weapons, but they can also be used for a variety of smaller defense tasks.

For example, one can establish a zero reference anywhere one wishes in an ordinary carrier. Inside that zero, one can establish as many independent "carriers" as one wishes, and hide them completely from ordinary detectors.

The way to do that is easy. Take as complex a signal as you wish. Subtract it from zero. That gives a "complement" which, when summed with the original signal, will produce the zero. Then only a scalar detector can go inside the zero and pullout the individual components.

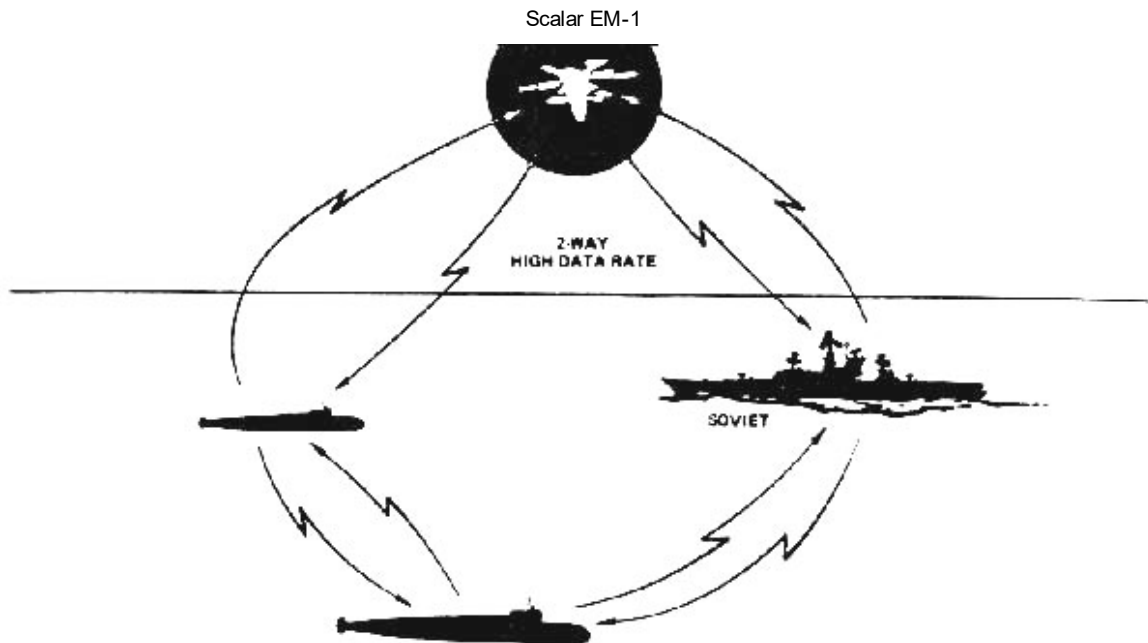
So take a carrier wave. Let the enemy jam it completely, with gobs of power.

Your scalar communication channel stays serenely there, calm and unjammed. The enemy thinks you're jammed and can't communicate. Meanwhile, you continue to communicate just fine.

Or be real smart. Take one of those components inside the first zero. Pick a zero reference inside it. Hide still more carrier components inside the second zero. Do this as many times as you wish.

You can put all the telephone calls in the United States of America on one carrier. And you can keep them clear, right through total jamming.

UNIQUE COMMUNICATIONS**SLIDE 77**



But that's still not all.

You can also communicate with your submarines underwater. High data rate. Chat away as you wish. You can scramble, frequency hop, encrypt, the works. They can also communicate back to you.

Remember. EM force fields of any appreciable frequency won't travel through the water. Natural EM potentials grab charged particles and ions, so they won't travel through the ocean either. But artificial potentials don't grab onto charged particles or ions. and they will go through the ocean quite nicely.

Everything -- aircraft, ships, shore installations, submarines, etc. -- can communicate like gang busters if they possess scalar EM technology.

In fact, you can even build scalar EM underwater radar if you wish.

The airborne scalar EM radar can see under the ocean with a little adjustment, perhaps as well as a conventional side-looking radar sees distant targets today. The airborne scalar EM radar can detect and track the underwater submarine while tooling along.

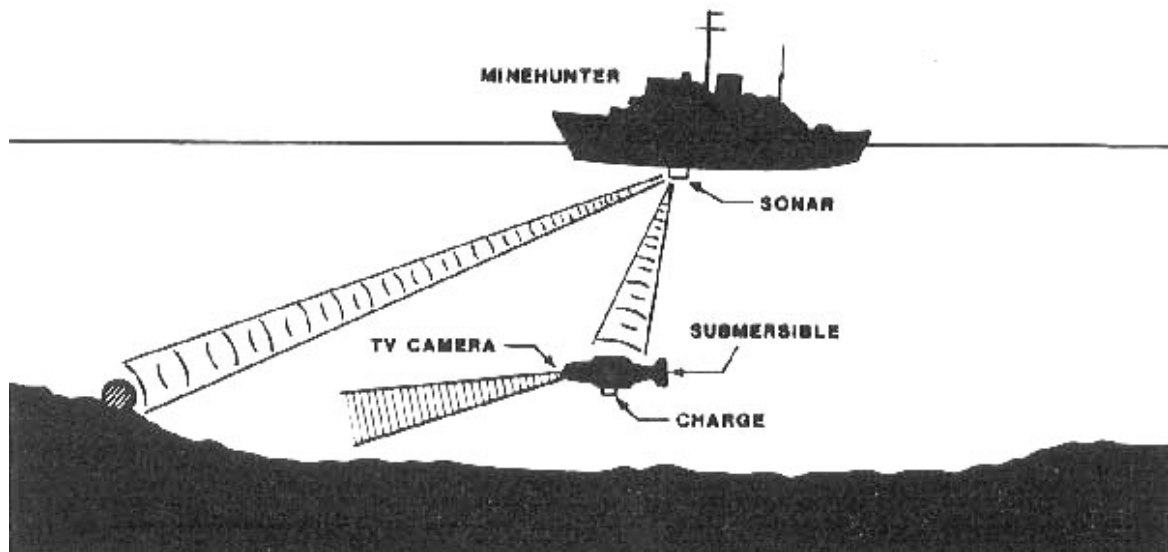
In fact, the airborne scalar EM radar can then destroy the sub, by using a little scalar interferometry. And it's even possible to do scalar interferometry with a single transmitter! How, is proprietary to a friend.

In fact, you can even use your enemy's jamming transmission as a "wire" along which to establish your scalar EM channels. You can use these scalar channels in the "weakly endothermic mode" to locate his transmitter and "lock-in" on it. You can "walk" the lock-in right past his encryption function to the "clear" input, and receive and record that in the clear. All this from a distance.

You can then destroy his equipment if you wish, or just continue to monitor him in the clear if it's important to do so. Perhaps now we can understand what the decades-long weak microwave radiation of the U.S. Embassy in Moscow is all about. Or why the Soviets are building a nice new Embassy, bristling with antennas, on the high ground in Washington, D.C.

MINE COUNTERMEASURES (ORTHODOX SYSTEM)

SLIDE 78



Take something like mine countermeasures, for example. Finding and destroying mines -- particularly those placed on the bottom in relatively shallow areas such as ports and rivers -- is a really tough problem.

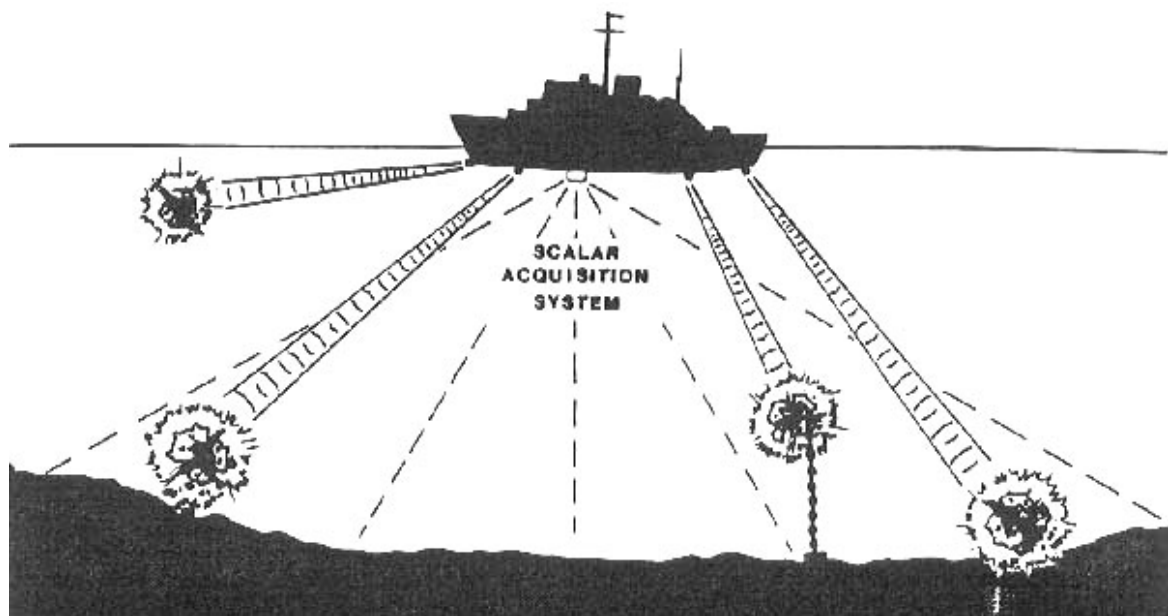
Presently it's often done as portrayed on this slide.

Here a minehunter ship uses an underwater sonar to locate the mine, or what resembles a mine. Then it directs a submersible robot vehicle to proceed over to the object and examine it with an underwater television camera. If it's a mine, the submersible places a remotely-operated charge beside it. then chugs away. When it reaches a safe distance away, the charge is exploded, causing the mine to detonate.

A very painful process. Very time consuming, and very difficult.

MINE COUNTERMEASURES (SCALAR EM SIGNALS)

SLIDE 79



Now try the same thing while using scalar EM underwater systems. The scalar EM acquisition system is really a sophisticated scalar radar. It scans a large area rapidly, locating moored mines, bottom-planted mines, and drifting mines.

The acquisition system is also a scanned "underwater eye ." The operator in the surface vessel can tell whether or not it's a mine he's located.

Once the target mine is detected, a computer computes the firing parameters for a scalar interferometry pulse to hit it and destroy it. The operator fires the pulse, destroying the mine.

The same system that detects the mine at a distance, identifies and destroys it at a distance.

In this way large areas can be quickly scanned and swept clean of mines.

If a suspicious object is detected and one is still not quite sure it's a mine, shoot it anyway! If it's a mine, it explodes. If it's just a rock, nothing happens.

So the same system can do "discrimination by fire."

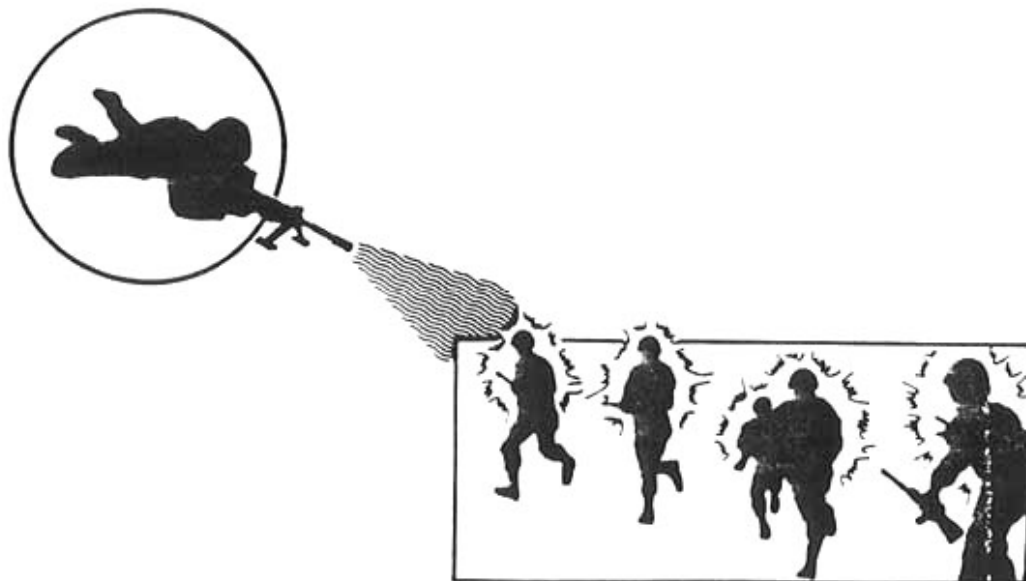
The same system is useful to destroy midget submarines, bottom crawlers, etc.

It can also wipe out whole arrays of underwater sensors by electromagnetically dudding them.

It can even take on a sub if it has to! Here it would just gently kindle EM energy inside the sub's controls, causing it to lose control of all its systems. The sub would then sink to crush depth and implode. The scalar EM mine sweeping system could, of course, simply "blow" the sub, but might itself get caught in the resulting explosion.

SCALAR ANTI-PERSONNEL WEAPON

SLIDE 80



From a military viewpoint, these scalar EM weapons are really quite all-around weapons.

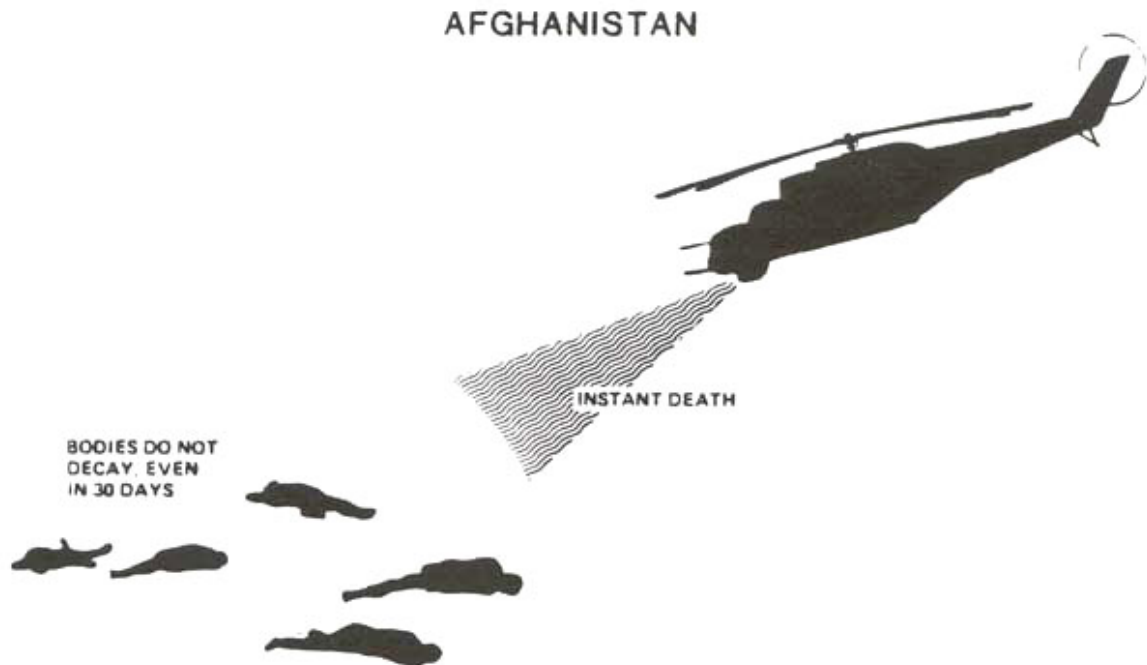
For example, they are very lethal against personnel.

Set in the "high intensity pulse mode," one blast and a person's nervous system is destroyed instantly. Total, instantaneous death results. One can blast away at entire groups of infantrymen, for example. It's the peak power that's important, not the average power. So the weapon doesn't require too much battery power.

Set on a lower intensity pulse mode, one zap can simply knock out a person, rendering him instantly unconscious. Quite useful if one needs prisoners to interrogate. Also very silent, which is useful in operations employing stealth and surprise.

SOVIET TACTICAL DEATH RAY

SLIDE 81



The Soviets are employing just such a scalar "death ray" weapon in Afghanistan, apparently in the noses of some of their HIND helicopters.

These choppers usually fire gas rockets to camouflage the testing of the tactical scalar death ray. For example, they may fire rockets filled with nerve gas, and some persons will die convulsively from the chemical.

Those hit by the scalar EM weapon, however, have a most peculiar death mode.

Death comes-instantly and totally. There is no convulsion, no response. The entire nervous system is destroyed instantly. Every living cell in the body is killed instantly, including all bacteria, germs, etc.

A body hit with this thing falls like a limp rag and lies where it falls. It doesn't decay in even 30-45 days. In a macabre fashion, it's been reduced to something like food irradiated with nuclear radiation; everything is killed, so the material is preserved for an extended period before any decay can set in.

Western military authorities have speculated that this strange death is due to some sort of eery new gas.

However, even with the most virulent gas, some seconds are required for a body to die. And while it's dying it goes into convulsions. Violent convulsions.

This eery, instant death that leaves a non-decaying corpse is not due to a gas. This is the signature of a high-powered pulse kill using a scalar EM weapon.

The associated gas rockets are the disguise used to fool our intelligence analysts.

They're just part of the Soviet deception plan.

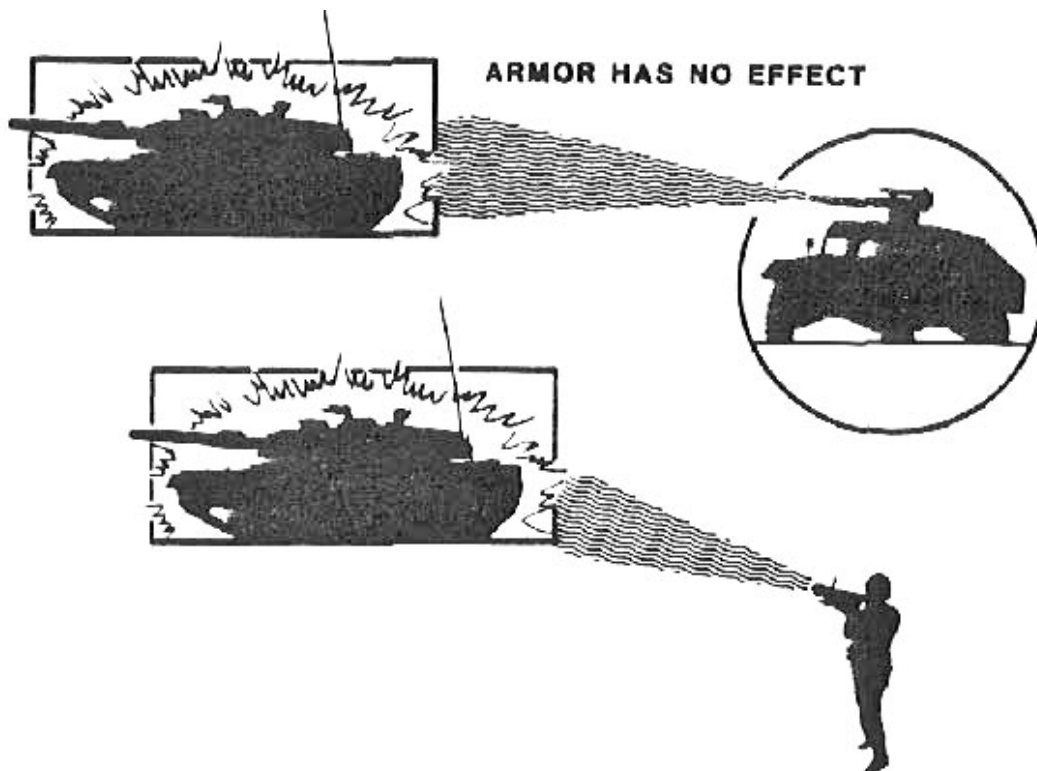
ADDITIONAL NOTES AND REFERENCES

15. For details of the mysterious, instant deaths in Afghanistan, see Yossef Bodansky, "Soviets testing chemical agents in Afghanistan," Jane's Defence Weekly, 1(13), Apr. 7, 1984, p. 508

Note from CSETI Webmaster: these non-decaying corpses sound suspiciously like the state of the corpses of the cattle that are slaughtered by renegade covert forces attempting to create the "evil ET cattle mutilation scenarios."

SCALAR ANTI-TANK WEAPON

SLIDE 82



Such weapons are also effective against armored vehicles, for example.

They can be carried by personnel, mounted on vehicles, mounted in helicopters, etc.

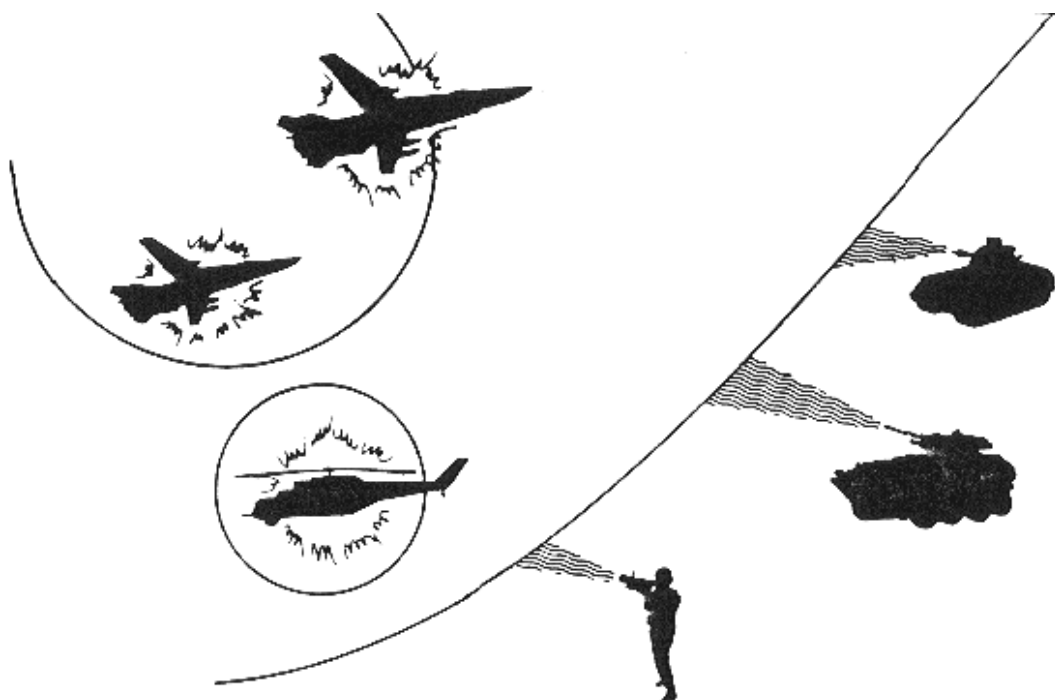
They are truly all-purpose weapons.

An infantryman with a bazooka-sized scalar EM pulse weapon can easily knock out a tank with one shot. The armor has no effect; scalar EM goes right through conductive shielding and Faraday cages.

And with the same weapon he can knock out another tank, and another, and another...

SCALAR ANTI-AIRCRAFT WEAPON

SLIDE 83.

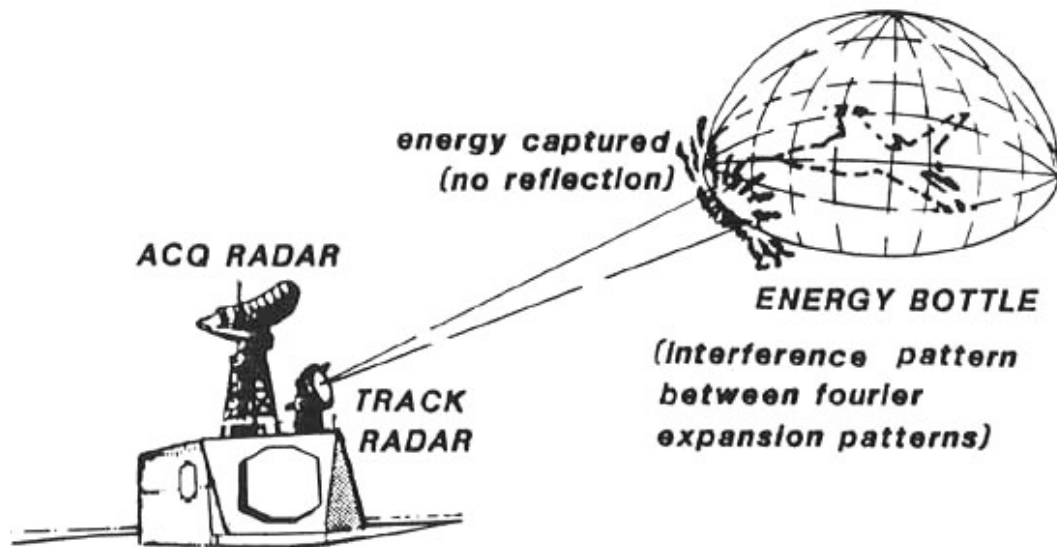


And, if he's attacked by a helicopter or a fixed-wing aircraft, he can bring the same weapon to bear on it. He can knock down a chopper or a jet. With one shot. And another. And another.

Also, it's a line-of-sight weapon. He doesn't have to compute lead angle and all that jazz. Just aim, get the target in his sights, and pull the trigger.

RADAR INVISIBILITY

SLIDE 84



Another neat trick you can do with scalar EM is make an aircraft invisible to ordinary radar.

Just use multiple transmitters on the airplane to establish a spherical interference shell, in the bandwidth of the threatening radar, around the aircraft.

When the signal pulse (or continuous wave) from the ground-based radar strikes the "energy bottle" in the shell, it interferes with it and is diffracted, scattered, and partially absorbed.

The ground-based radar doesn't get any coherent return pulse or return signal reflected from the target.

Radars don't track aircraft; they track the reflection of their own signal bouncing off aircraft. No reflected signal, no aircraft -- as far as a radar is concerned.

To shield against a passive radar (one which tracks emissions from the aircraft), just detect and complement your own emissions so that "near zeroes" result in the spectrum of interest.

Or do both, to protect against both.

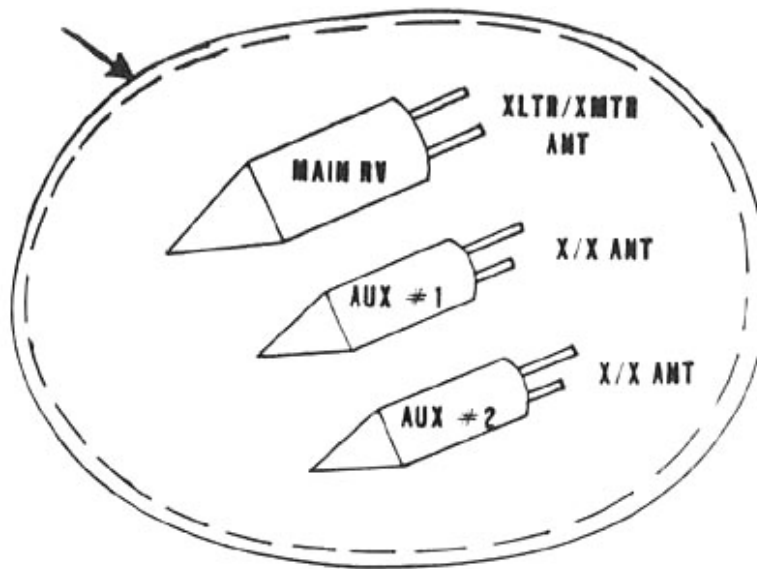
It's even possible to cool the exhaust and heated surfaces of the aircraft by a scalar EM adaptation of electrostatic cooling. Theoretically it's even possible to cause the aircraft to "disappear" optically. Takes a bit of doing, but it's possible. The basic scheme here is that, when a photon hits the target from a given direction, it's absorbed totally, and a corresponding or "matching" photon is emitted from the opposite side in the same direction the original photon was going. In that fashion, the light emitted from the target from one direction seems to have "passed through it" from the other direction.

Since that's what empty space does, then what a distant observer sees is "empty space," so far as he can tell.

AN EFFECTIVE PENETRATION AID

SLIDE 85

FOURIER EXPANSION ENERGY BOTTLE



Of course you can do the same thing for re-entry vehicles.

Use some multiple antennas on a vehicle. Or better yet, use satellite RV's to carry the extra transmitters necessary for scalar interferometry.

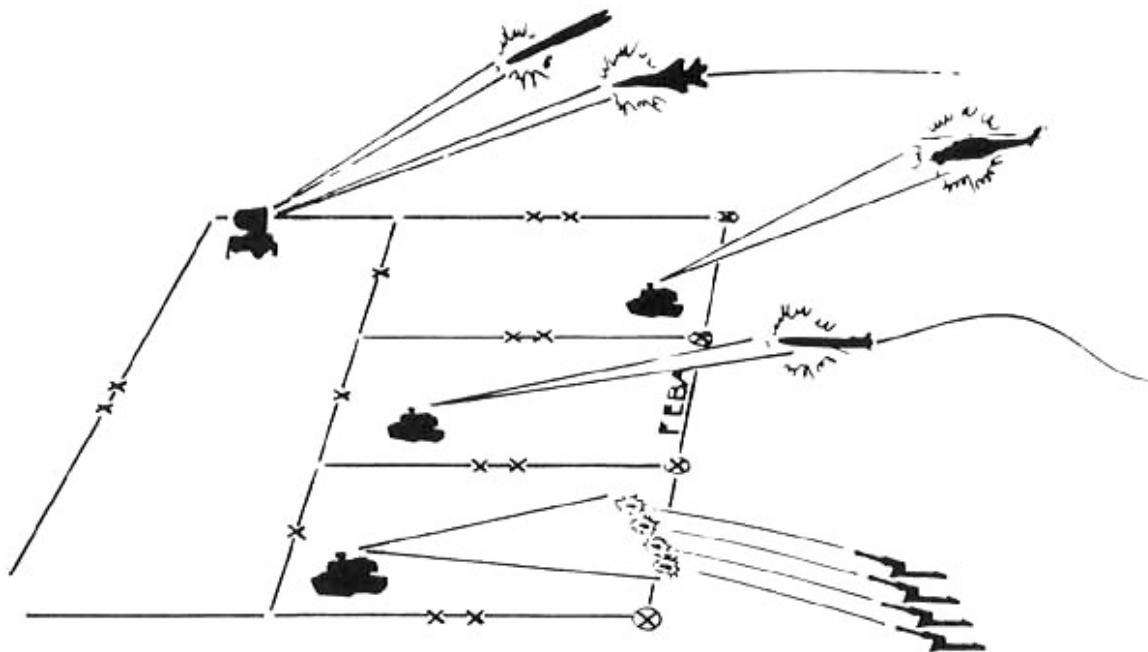
Deploy the interferometer RV's and activate the scalar EM transmitters. Place an energy bottle Fourier expansion interference shell around the ensemble in the bandwidth of interest.

Radars in that bandwidth now will be unable to detect the incoming ensemble. If nothing detects the threat, nothing is going to shoot at it or react to it.

This can also be used on a bus vehicle during midcourse, for example.

UNIQUE CAPABILITIES: ATM/AD/AARTY

SLIDE 86



But the uniqueness of scalar EM devices and weapons doesn't end there.

You can hit lots of other threats that are presently difficult or impossible to effectively handle.

For example, on the tactical battlefield, the same scalar EM radar interferometer system can defend against tactical missiles (ATM role), aircraft (AD role), cruise missiles (ACM role), and even artillery and mortar shells (AARTY role).

How the devil, you might ask, can it defend against artillery and mortar shells?

Simple. Sweep the artillery or mortar barrage with closely-spaced pulses. Sorta like a machinegun. Or more like a

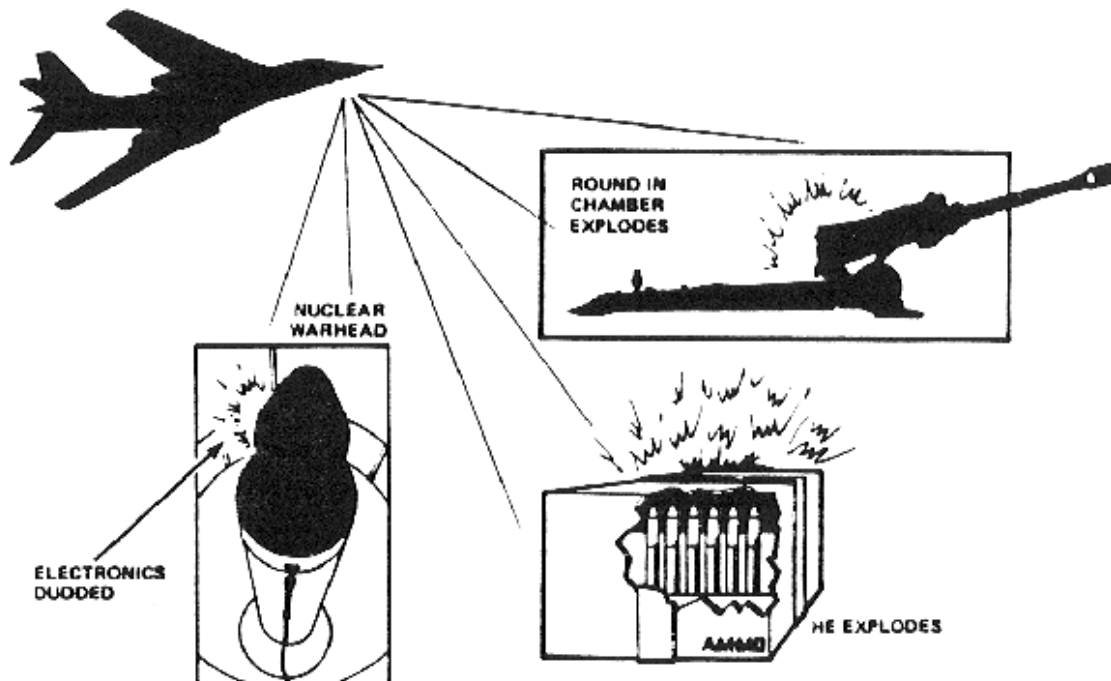
phased-array radar.

If the peak power in the sweeping pulses is sufficient, the explosives are sparked and detonated. Fuses are destroyed.

So even mortar and artillery rounds can be destroyed, by the same system providing air defense and anti-tactical missile defense.

UNIQUE CAPABILITIES

SLIDE 87



That's still not all.

An incredible number of different types of targets can be attacked with scalar EM weapons.

For example, aircraft equipped with scalar EM weapons can attack targets such as loaded artillery pieces. The round in the chamber explodes, destroying the weapon.

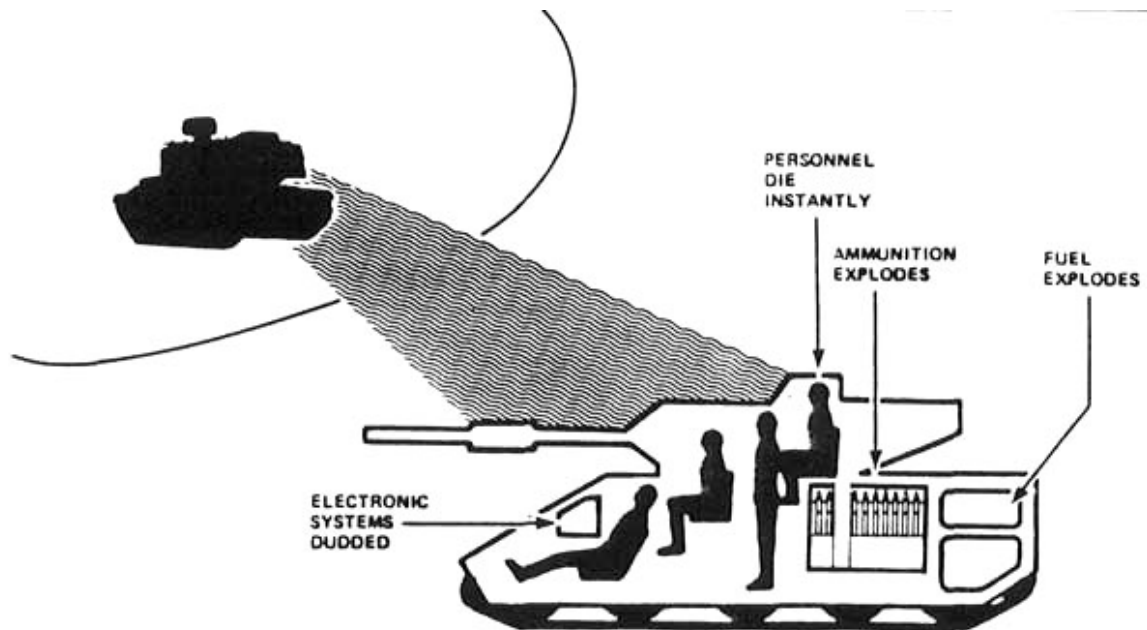
It can also attack nearby stored ammunition. Again, the high-explosive in the ammunition explodes, destroying the store.

Even underground missiles can be attacked. The scalar pulse will go right through the overhead cover and dud the electronics, including the nuclear warhead. It will also detonate the HE in the warhead and detonate the fuels and propellants.

A great variety of other targets can also be attacked, as we shall see.

UNIQUE CAPABILITIES

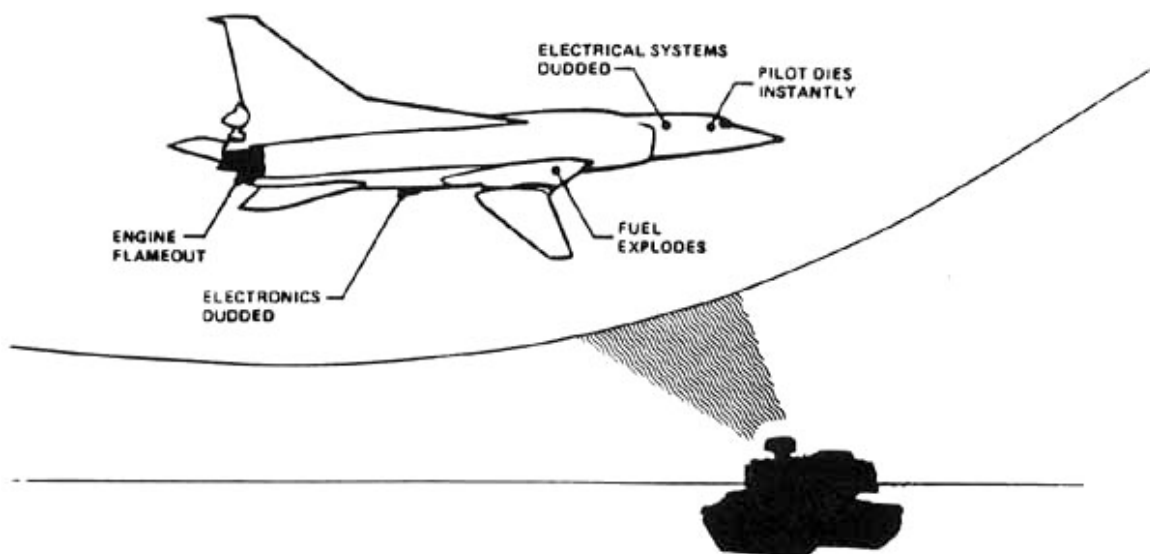
SLIDE 88



For example, suppose one attacks a tank.
 With scalar EM pulse, the personnel die instantly. Total personnel kill is achieved.
 All electronic systems of the tank are duded. Total systems kill is achieved.
 The ammunition in the tank explodes. Total kill is achieved.
 The fuel explodes. This is another total kill mechanism.
 That tank has been killed totally, by a variety of mechanisms, all simultaneously.
 That's a k-kill in any analyst's book.
 And don't worry about retrieval and repair. That tank is finished permanently.
 Even the most modern tank is just as vulnerable as the most obsolete.

UNIQUE CAPABILITIES

SLIDE 89

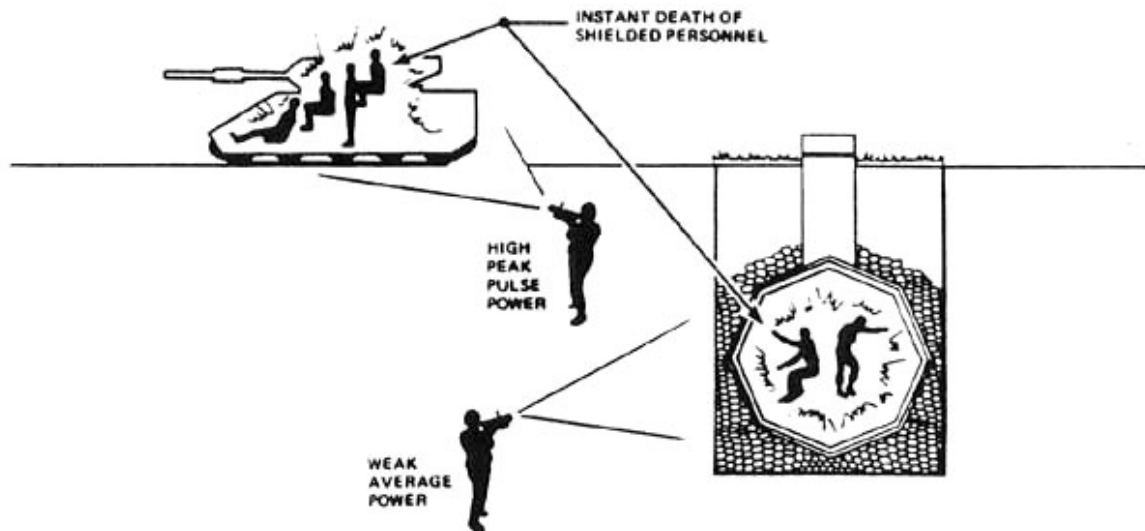


Suppose one attacks a fighter-bomber aircraft.
 Again, the kill is catastrophic from multiple simultaneous kill mechanisms.
 The pilot and crew die instantly. Total destruction of their nervous systems.
 The electrical systems are duded.
 The electronics in all avionics and ordnance is duded.

The fuel explodes.
HE in on-board or out-board ordnance explodes.
The jet engine flames out if the pulse is powerful enough.
That aircraft is finished. Permanently.
And it's point-and-shoot, line-of-sight.
Even the most modern aircraft is just as vulnerable as the most obsolete.

UNIQUE CAPABILITIES: PENETRATE SHIELDING

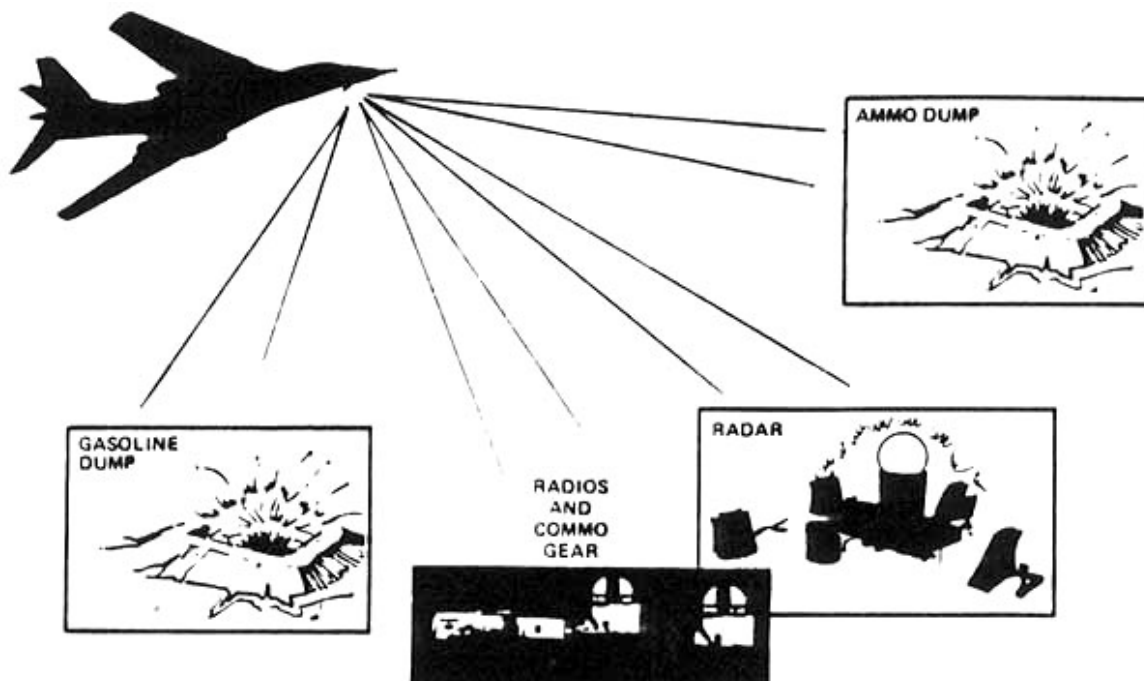
SLIDE 90



Shielding is ineffective.
The scalar pulse (or continuous wave) can go anywhere gravity can go.
It penetrates the steel hull of tanks and armored vehicles.
It penetrates underground shelters and bunkers.
It penetrates pillboxes and fortifications.
Foxholes are no protection. Just shoot through the earth into them.
There is no longer any place to hide.

MULTI-PURPOSE WEAPONRY

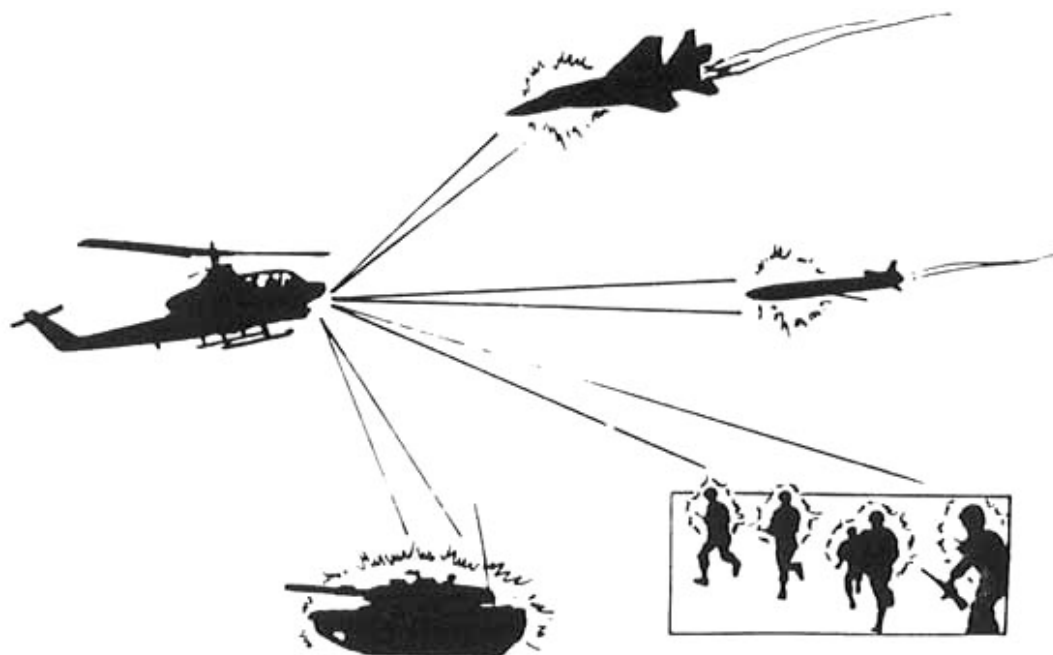
SLIDE 91



These scalar EM weapons are all-purpose. Things such as ammunition dumps, radar systems, radios and communication gear, communications centers, gasoline dumps, etc. can easily be destroyed. Not only that, but the weapons can be swept, giving area coverage. You can hit both point targets and area targets.

MULTI-PURPOSE WEAPONRY

SLIDE 92



Look at what a weapon a helicopter becomes.

The same vehicle, equipped with scalar EM weapons, can engage and destroy jet aircraft, other helicopters, cruise missiles, personnel, and armored vehicles.

It can also hit all the other targets we've been talking about. Any vehicle equipped with scalar EM weapons becomes a formidable destroyer on the battlefield.

And "reconnaissance by fire" takes on a particularly lethal meaning.

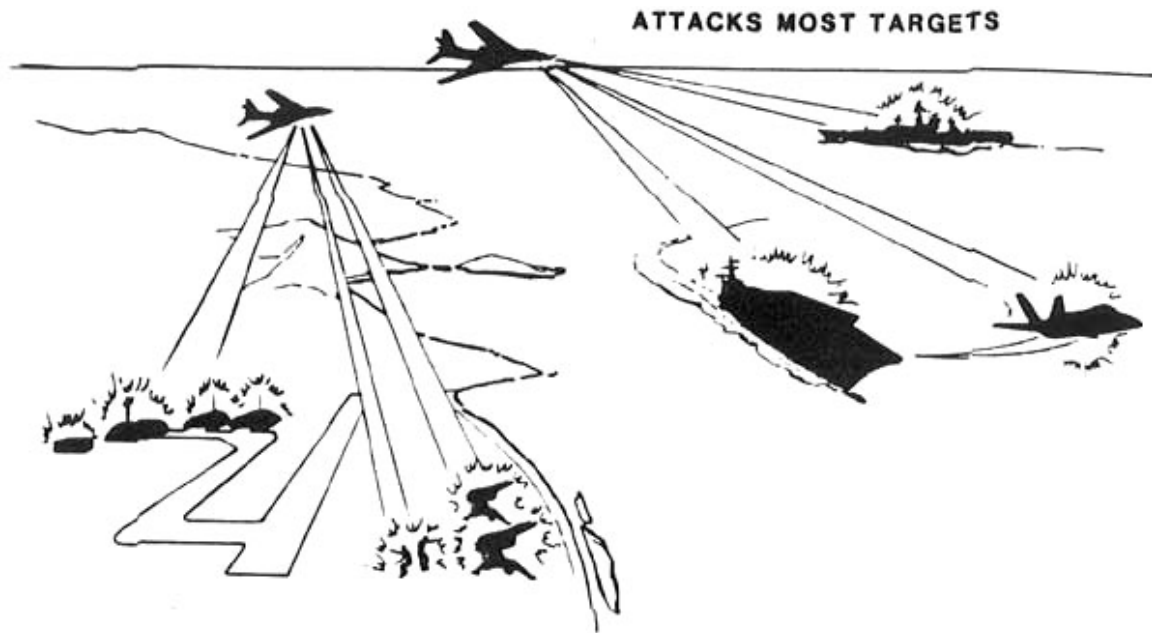
For example, don't worry about the enemy in cover and concealment, or highly camouflaged.

Don't worry about decoys or dummy positions.

Just sweep the area with scalar EM fire. The actual targets will be discriminated by fire and destroyed.

MULTI-PURPOSE WEAPONRY

SLIDE 93



As can be seen on this slide, most targets of interest can be attacked.

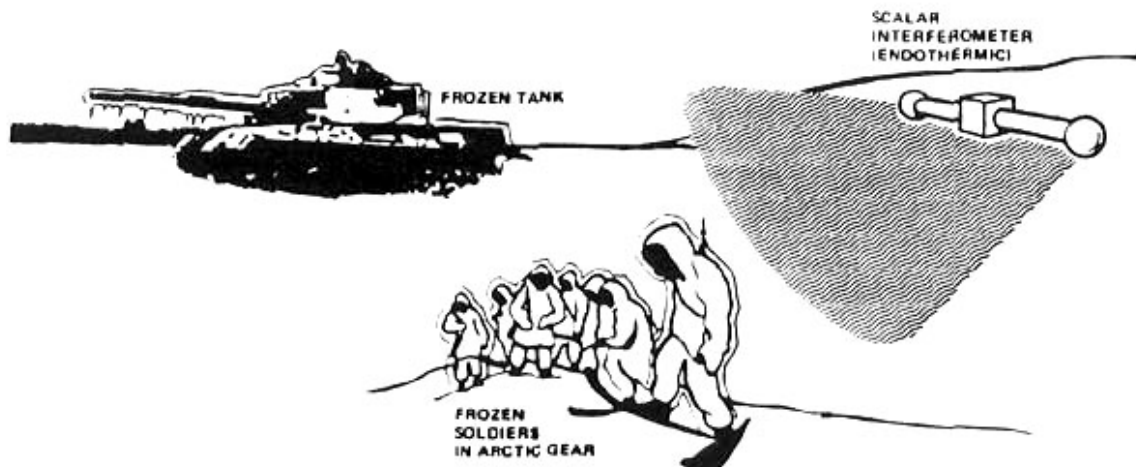
A single aircraft can sink an aircraft carrier or destroy a battle cruiser from afar.

It can also destroy aircraft, ground installations, artillery, personnel, nuclear weapons storage sites, tanks, vehicles, fuels, and combustibles.

UNIQUE CAPABILITIES: HEAT EXTRACTION

SLIDE 94

- IN A ZONE, INSULATION HAS NO EFFECT
- EXTERNAL HEATING HAS NO EFFECT



Or one can get truly exotic.

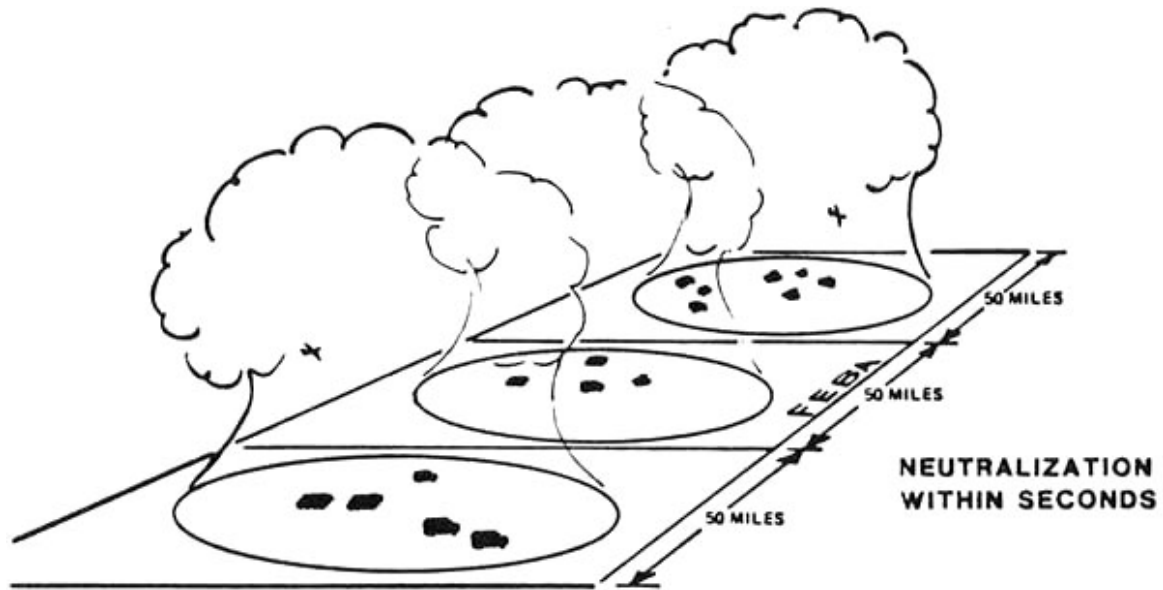
To prevent destroying equipment and installations, the endothermic mode can be utilized.

Cold explosions can be used to freeze tanks, personnel, and equipment.

The equipment and tanks thaw out.

The personnel thaw out too, but they are dead when they do. Heaters and arctic clothing are no protection.

SLIDE 95



For example, suppose three cold explosions, each 50 miles in diameter, are placed upon the front-line strength of NATO.

In seconds there is no longer any "front line strength" of NATO. Every living thing is frozen into a block of ice.

A few more of these things placed on selected rear area installations, and the battle is over before it gets started. Say in about one minute flat!

Suppose NATO is quickly defeated – say in two days. And then the Russians offer us a "Dunkirk." They agree to allow us to evacuate the beaten remnant of our forces.

Are we going to evoke a strategic nuclear exchange, or are we effectively "decoupled" from Europe? Particularly if the Soviets also offer sweeping accommodations to the Europeans, and they accept? If we punch the strategic button, we guarantee our own absolute destruction. (MAD doctrine and all that, old chap!)

Whether or not we could do anything to the Russians is a matter of conjecture.

For a demonstration, they could even invite us to launch a couple of missiles, and destroy them over our heads shortly after launch.

And they could take out a few submarines under the ocean, just to make it believable.

And destroy some SAC bombers that are orbiting on station.

Or take out a U.S. Naval Task Force, with a nuclear carrier, as a demonstration that they mean business.

Would a sane President go ahead and destroy us, or accept the Soviet's "Monroe Doctrine" and an "armistice"?

If the Soviets thought he was seriously contemplating ordering a nuclear strike, they could immediately destroy all our nuclear armaments where they sit. Our own weapons would obliterate us!

What would Congress do – after the Soviet Union had demonstrated its absolute power, offered a Dunkirk and armistice, and threatened our total destruction if we "reached for the holster," so to speak – when it realized the President might actually be contemplating evoking assured national suicide?

What would you do if you were a Congressman? If you were the President?

THE TRANSMITTER IS THE MAJOR WEAPON

SLIDE 96



As shown on this slide, with scalar EM the transmitter becomes the major weapon on the battlefield. Almost every type of target of any importance can be easily and effectively attacked and destroyed or nullified by scalar EM weapons.

Small wonder the Soviets do not discard their thousands of "old" radars!

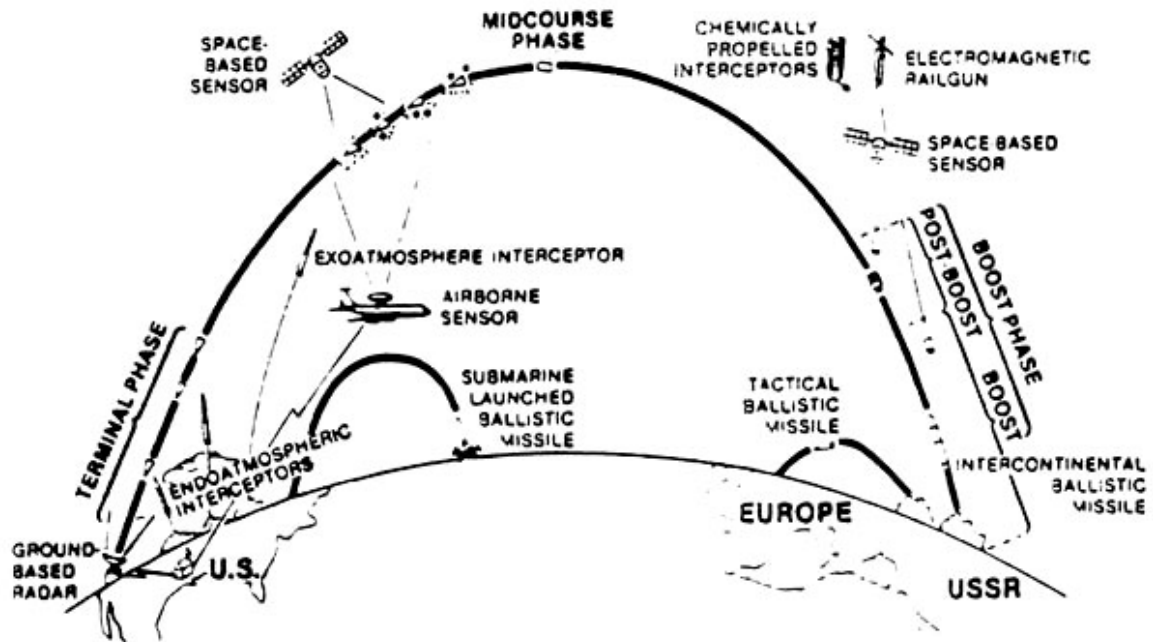
How effective do you suppose some of their "old" transmitters on their "old" aircraft might be?

What chance do you think SAC bombers would have against thousands of "old" radar-directed gun sites and "obsolete" air defense missile sites?

Could it be that even something like the old SA-1 could be startlingly effective?

STAR WARS - THE FINAL FRONTIER?

SLIDE 97



But what of our advanced concepts, such as the strategic defense initiative?

Here we show some of the expensive and complex components of that powerful system.

We have ground-based radars, endoatmospheric interceptors, exoatmospheric interceptors, airborne sensors, space-based sensors, chemically propelled interceptors, electromagnetic railguns, particle beam weapons, high energy lasers, etc. all tied together by a massive command and control system. This massive, expensive system is designed to detect and destroy missiles, including ICBMs, IRBMs, cruise missiles, SLBNs, etc.

The system detects the missile launches and engages them from launch on in to the terminal phase.

Massive systems. Electromagnetic marvels. Nuclear-pumped lasers of staggering power. Perhaps even x-ray and gamma-ray lasers. Directed energy RF weapons. Stupendous railguns. Sensors everywhere. Giant webs of communications. Banks of computers and control systems.

And its totally vulnerable to scalar EM interferometer weapons. Giant scalar EM "radars" can simply sweep through all that like a scythe through standing hay.

As it stands, it's obsolete before its design is even finished.

It's obsolete to Soviet scalar EM weapons that are already deployed and operationally tested in place!

Without scalar EM weapons and defenses, all our present weapons and concepts are deadly vulnerable.

The war is over before it hardly gets started. It's not a war; it's more like a clay pigeon shoot.

Understand, if orthodox science was all the Russians possessed, the Strategic Defense Initiative would be the way to go.

But they do possess something else, and presently they have all the trump cards in the deck.

COMPARISON OF EM CONCEPTS

SLIDE 98

		• T H E O R Y •		
		CLASSICAL EM	QM VIEW	SCALAR EM (ARTIFICIAL $\emptyset$)
C H A R A C T E R I S T I C	VACUUM SPACETIME	LINEAR NO CHARGE	LINEAR, CHARGED (VIRTUAL) STATISTICALLY	NONLINEAR, CHARGED (VIRTUAL) W/ DETERMINISTIC COMPONENTS
	VIRTUAL SUBSTRUCTURE	NONE (FLUID EQUATIONS)	YES, STATISTICAL	YES, STATISTICAL, DETERMINISTICALLY WEIGHTED.
	FORCE, IN VACUUM?	CAUSE, YES	EFFECT, YES	EFFECT, NO
	ZERO FORCE FIELDS	NO EFFECT	BOHM-AHARONOV EFFECTS	SUBSTRUCTURE EFFECTS, ENGINEERABLE
	POTENTIALS	FICTICIOUS	REAL, PRIMARY, STATISTICAL SUBSTRUCTURES.	REAL, PRIMARY, DETERMINISTIC SUBSTRUCTURES
	CAUSATIVE AGENT	FORCE FIELDS	POTENTIALS	POTENTIALS AND INFOLDED FIELDS OF SUBSTRUCTURES

On this slide and the three that follow, we show a comparison of some of the major characteristics of the three kinds of electromagnetics.

We compare the classical, the quantum mechanical, and the scalar EM (electrogravitational) views of electromagnetics

Notice the differences between the three in regards to vacuum spacetime, virtual substructure, force, whether or not force exists in vacuum, the effect of zero force fields, potentials, and what is to be regarded as causative agents.

COMPARISON OF EM CONCEPTS (CONTINUED)

SLIDE 99

		• T H E O R Y •		
		CLASSICAL EM	QM VIEW	SCALAR EM (ARTIFICIAL $\emptyset$)
C H A R A C T E R I S T I C	CHARGE CONSERVATION	YES	YES	NOT NECESSARILY
	ACTION AT A DISTANCE	NO	NO, EXCEPT BOHM-AHARONOV EFFECTS	YES, SCALAR INTERFEROMETRY
	SCALAR (ZERO-VECTOR) RESONANCE	NO	NO	YES
	INERTIA IS ELECTRICAL	NO	NO	YES
	GRAVITY IS ELECTRICAL	NO	NO	YES
	MASS IS ELECTRICAL	NO	NO	YES

Now note the differing views of charge conservation, action at a distance, scalar resonance, and whether inertia, gravity, and mass are electrical.

COMPARISON OF EM CONCEPTS (CONTINUED)

SLIDE 100

		• T H E O R Y •		
		CLASSICAL EM	QM VIEW	SCALAR EM (ARTIFICIAL $\emptyset$)
C H A R A C T E R I S T I C	CHARGE	WITH MASS	WITH MASS	MASSLESS
	RELATIVISTIC EFFECTS DUE TO	VELOCITY	VELOCITY, INTERFERING POTENTIALS	INTERFERING POTENTIALS
	HIDDEN VARIABLES	NO	STATISTICAL, NEGLIGIBLE	DETERMINISTIC, MAJOR ROLE.
	VECTOR THEORY APPLIED TO EM	OKAY	OKAY	REQUIRES REVISION
	VACUUM EM WAVE	TRANSVERSE	TRANSVERSE	LONGITUDINAL W/ SWIRLS
	ENERGY/MASS CONSERVATION	YES	YES	NOT NECESSARILY. AN ENERGY CONSERVED.

Continuing, note the differences in the views of charge, what relativistic effects are due to, whether or not one has hidden variables and whether they are engineerable, how vector theory is applied to electromagnetics, the nature of the EM wave in vacuum, and conservation of energy/mass.

COMPARISON OF EM CONCEPTS (CONCLUDED)

SLIDE 101

		• T H E O R Y •		
		CLASSICAL EM	QM VIEW	SCALAR EM (ARTIFICIAL Φ)
C H A R A C T E R I S T I C	ELECTRO- GRAVITATIONAL WAVES ?	NO	NO	YES
	PRIMARYLY INTERACT W/ (IN ATOM)	ELECTRONS	ELECTRONS	NUCLEONS
	SPACETIME DIMENSIONS	4	4	≥ 6
	GEOMETRY	MINKOWSKI	PRIMARYLY MINKOWSKI	KALUZA-KLEIN
	ZERO-SUMMED VECTORS RE- PLACED BY	ZERO VECTOR	ZERO VECTOR	ARTIFICIAL POTENTIAL
	RELATIVITY ASPECTS: LOCAL, DISTANT	SPECIAL, SPECIAL	SPECIAL, MAY BE GENERAL	GENERAL, GENERAL
	CAN AFFECT SCHROEDINGER EQUATION	NO	NO	YES. CAN ENGI- NEER IT.

Now we examine the three views for whether or not electro-gravitational waves exist and what they interact with, the number of required spacetime dimensions, the type of geometry, the nature of a zero-summed EM vector, local and distant relativity aspects, and whether or not the probability states propagated by the Schroedinger equation can be deterministically engineered.

As can be seen from the last four slides, the three views are quite different, and the scalar EM view is drastically different.

SUMMARY (1)

SLIDE 102

- AHARONOV-BOHM EFFECT
 - VERIFIED
 - MESOSCOPIC SCALE (CENTIMETERS)
 - NEED MACROSCOPIC COHERENCE
 - POTENTIAL WEAPON IMPLICATIONS
 - PROBABLE SOVIET WEAPONIZATION
- 6 - 8 ADDITIONAL ORDERS OF MAGNITUDE

NEEDED

In summary, we can now state unequivocally that the Aharonov-Bohm effect has been conclusively proven, at least for the mesoscopic scale over a few thousand Angstroms, and possibly over a few centimeters.

But in these experimental proofs; the "natural" type of potential has been used. It is basically incoherent in its substructure, dooming the effect to stay small.

By utilizing macroscopic EM force fields and waves to zero-sum and comprise artificial potentials, the coherence can be maintained over a macroscopic distance -- even for hundreds of thousands of kilometers.

The weapons implications -- only some of which we have set forth in this treatise -- are mindboggling.

SUMMARY (2)

SLIDE 103

- **ZERO-VECTOR (SCALAR) EM SYSTEMS**

- SCALAR EM WAVES
- KEY TO ELECTROGRAVITATION

- **DETECTORS**

- INITIAL DETECTORS DEVELOPED
- NEED IMPROVED DETECTORS

- **INITIAL THEORY BEGUN**

- **PRELIMINARY EXPERIMENTS SUPPORT**

Zero-vector (scalar) EM systems are the key to scalar EM waves, which are actually electrogravitational waves.

Scalar wave detectors have been developed and are being improved. Further improvement is needed. This development is limited only by funds.

The initial theory has been begun. More work is needed. Again, this development is limited only by funds.

Preliminary experiments support the scalar EM concepts.

Equipment can be designed and made to work electro-gravitationally.

SUMMARY (3)

SLIDE 104

- **INTERFERENCE PHENOMENA ARE KEY**

- ACTION AT A DISTANCE
- EXOTHERMIC MODE
- ENDOTHERMIC MODE
- 3-D FOURIER EXPANSIONS (TRUNCATED)

- **EFFECTS IN/ON NUCLEUS**
- **NOT ENERGY TRANSMISSION THROUGH SPACE**
- **SHIELDING INEFFECTIVE**

Interference phenomena are key.

One can get action at a distance -- even over hundreds of thousands of kilometers.

One can engineer gravitational and inertial effects.

One can engineer the nucleus, including transmute it, easily and cheaply. One could clean up all the nuclear wastes.

Electromagnetic energy can be produced at a distant target, or extracted from a distant target.

This is not energy transmission through space in the form of EM force fields. Instead, it is transmission through spacetime in the form of electrogravitational potentials.

Conventional EM shielding is ineffective against scalar EM.

SUMMARY (4)

SLIDE 105

MOST SYSTEMS ARE VULNERABLE

- **ELECTRONICS (INCLUDING OF FUZING/WARHEAD)**
- **PERSONNEL**
- **EXPLOSIVES/PROPELLANTS/FUELS**
- **ORDNANCE**
- **SHIPS/SUBMARINES/TORPEDOES**
- **AIRCRAFT/HELICOPTERS/MISSILES/DRONES**
- **TANKS/APCs/WEAPONS/SATELLITES/RADARS/C³I**
- **DEW SYSTEMS**
- **SURVEILLANCE/SENSOR SYSTEMS**
- **MINES/ARTY ROUNDS/NUCLEAR WARHEADS**

Almost every weapon system we presently have -- or are developing -- is totally vulnerable to scalar EM weaponry.

This includes personnel, electronics (including fuzing and warhead), explosives, propellants, fuels, ordnance, ships, submarines, torpedoes, aircraft, helicopters, missiles, drones, rockets, tanks, armored vehicles, weapons carriers, self-propelled and towed artillery, communications, satellites, radars, command and control, directed energy weapon systems, surveillance and sensor systems, mines, artillery rounds and ammunition, nuclear warheads, etc.

We are in dire straits. We need a "Manhattan Project" of the highest priority. Now!

The Soviets have already had the equivalent of seven or eight Manhattan Projects in this area.

SOVIET DEFENSE AGAINST MISSILES

SLIDE 106

**"IN OUR COUNTRY THE PROBLEM OF ELIMINATING
ROCKETS IN FLIGHT HAS BEEN SUCCESSFULLY
SOLVED BY SOVIET SCIENCE AND TECHNOLOGY....
IT IS INTERESTING TO NOTE THAT THE PROBLEM
OF ANTIMISSILE DEFENSE IS FAR FROM BEING
SOLVED IN THE WEST".**

**SOKOLOVSKIY
MILITARY STRATEGY,
3rd EDN., 1968.**

Here is a significant statement by Sokolovskiy, contained in Military Strategy, 3rd edition, 1968.
This is not propaganda. The Soviets really do have an effective missile defense. We do not. At the present rate we're going, we may not have one in the year 2000 -- if we live that long.

SURPRISE BY USING SECRET WEAPONS

SLIDE 107

**"EACH SIDE SECRETLY DEVELOPS NEW MEANS OF WARFARE
IN ORDER TO EMPLOY THEM UNEXPECTEDLY. HISTORY
KNOWS MANY EXAMPLES HOW THE EMPLOYMENT OF A NEW
WEAPON INITIALLY GAVE CONSIDERABLE SUCCESS BECAUSE
THE ENEMY, CAUGHT UNAWARES AND NOT KNOWING THE
COMBAT CAPABILITIES OF THIS WEAPON, WAS FOR SOME
TIME INCAPABLE OF EFFECTIVE COUNTERACTION".**

**V. Yo. SAVKIN
THE BASIC PRINCIPLES OF
OPERATIONAL ART AND TACTICS
MOSCOW, 1972.**

The Soviets took to heart the lesson of our secret development of the atomic bomb. Thrust suddenly upon a fanatical nation, the atomic bomb brought the empire of Japan to its knees.

Other lesser examples -- such as the impact of the German V-1 and V-2 missiles and jet fighter -- also were not lost on the Soviets.

SOMETHING RUSSIA DOESN'T WANT THE U.S. TO KNOW

SLIDE 108

**"OF PARTICULAR IMPORTANCE IS BASIC RESEARCH AIMED AT
DISCOVERING STILL UNKNOWN ATTRIBUTES OF MATTER,
PHENOMENA, AND THE LAWS OF NATURE, AND DEVELOPING**

NEW METHODS FOR THEIR STUDY AND USE TO REINFORCE THE STATE'S DEFENSE CAPABILITY".

COMMENTS:

- **PORTION OF A BOOK BY MARSHALL GRECHKO**
- **DELETED FROM ENGLISH TRANSLATION, BY SPECIFIC REQUEST OF THE U.S.S.R.**

But Marshall Grechko said it even plainer.

He made it clear that the Soviet Union has actively searched for great technical breakthrough areas. particularly in discovering new laws of nature. unknown attributes of matter. and new phenomena and developing their use for defense.

He made it so clear that the Soviet Union formally requested the U.S. State Department to have deleted from its. English translation that portion of his book.

That is a positive signature that the statement is exceedingly sensitive to the Soviets. In other words. it's a real tipoff.

So of course the State Department leaned on the publisher and got that section eliminated.

REFERENCES

SLIDE 109

1. Bass, Robert W., "Self-Sustained Non-Hertzian Longitudinal Wave Oscillations as Rigorous Solutions of Maxwell's Equations for Electromagnetic Radiation." Proceedings, IEEE Tesla Centennial Symposium, 1984, p. 89 - 90.
2. Des, Jack Y., "Scalar Fields: Their Prediction from Classical Electromagnetism and Interpretation from Quantum Mechanics." Proceedings, IEEE Tesla Centennial Symposium, 1984, p. 94 - 98.
3. Blade, Richard A., "Modification of Maxwell's Equations in Free Space to Account for Nonzero Photon Mass and Scalar Electromagnetic Waves." Proceedings, IEEE Tesla Centennial Symposium, 1984, p. 91 - 92.
4. Bearden, T.E., "Tesla's Electromagnetics and its Soviet Weaponization." Proceedings, IEEE Tesla Centennial Symposium, 1984, p. 119 - 138.
5. Kaluza, Theodor. Sitz. Berlin Preuss. Acad. Wiss. 966, 1921.
6. Klein, O., Z. Phys. 37, 895, 1928.
7. Misner, Thorne and Wheeler. Gravitation. W.H. Freeman and Co., San Francisco, CA 1973, pp. 19 - 21, 71 - 72, 163 - 165, and 367 - 369.
8. Vlassov, A.A. and V.I. Denisov, "Einstein's Formula for Gravitational Radiation is not a Consequence of the General Theory of Relativity." Theor. and Math. Phys., 53(3), June 1983, p. 406 - 418.
9. Denisov, V.I. and A.A. Logunov, New Theory of Spacetime and Gravitation." Inst. of Nuc. Rsch., USSR Acad. Sci., Moscow, 1981 (in Russian).
10. Roberts, Gwynne. "Witness to a Super Weapon?" The Sunday Times, London, Aug. 17, 1980.
11. CIA IR No. CD-B-321/15354-66, "Sighting of Unusual Phenomenon on Horizon Near Iranian/USSR Border." Sep. 8, 1966. FOIA release. 15 Dec. 1978.
12. CIA FI IR CO-B-324/33601-76, "Aerial Observation of Intense Source of Light." Nov. 18, 1976. FOIA release 15 Dec. 1978.
13. "Explosive Events Seen on Soviet Island." Aviation Week and Space Technology, Sep. 26, 1983. P. 31.

Here are some important references.

REFERENCES (CONCLUDED)

SLIDE 110

14. Possony, Stefan T., "The Tesla Connection." Defense and Foreign Affairs," Aug. 1984, p. 12 - 14, 27.
15. Aharonov, Y and D. Bohm, "Significance of Electromagnetic Potentials in the Quantum Theory." The Physical Review, Second Series, 115(3), Aug. 1, 1959, p. 485 - 491.
16. Chambers, R.G., "Shift of an Electron Interference Pattern by Enclosed Magnetic Flux." Phys. Rev. Ltrs. 5(1), July 1, 1960, p.3 - 4.
17. Denisov, V.I. and A.A. Logunov, "The Inertial Mass Defined in the General Theory of Relativity has no Meaning." Theor. and Math. Phys., 51(2), Moscow Univ., May 1982, p. 163 - 170.
18. Gelinas, Raymond C., "Apparatus and Method for Determination of a Receiving Device Relative to a Transmitting Device Utilizing a Curl-Free Magnetic Vector Potential Field." U.S. Patent No. 4,447,779, May 8, 1984.
19. Gelinas, Raymond C., "Apparatus and Method for Modulation of a Curl-Free Magnetic Vector Potential Field." U.S. Patent No. 4,429,288, Jan. 31, 1984.
20. Gelinas, Raymond C., "Apparatus and Method for Demodulation of a Modulated Curl-Free Magnetic Vector Potential." U.S. Patent No. 4,429,280, Jan 31, 1984.
21. Gelinas, Raymond C., "Apparatus and Method for Transfer of Information by Means of a Curl-Free Magnetic Vector Potential Field." U.S. Patent No. 4,432,098, Feb.14, 1984.
22. Albright, Eugene A., "Magnetostatic Electrical Devices." U.S. Patent No. 4,429,314, Jan. 31, 1984.
23. Olariu, S. and I. Iovitzu Popescu, "The Quantum Effects of Electromagnetic Fluxes." Reviews of Modern Physics, 57(2), April 1985. Comprehensive 99-page review of Aharonov-Bohm Effect. Exhaustive list of references.
24. Phipps, Thomas E. Jr., "Critique of Accepted Theories of Special Relativity and Electromagnetism." Scientific Ethics, 1(2), Apr. 1985, p. 17 - 23.
25. Wallace, Bryan G., "The Great Speed of Light in Space Coverup." Scientific Ethics, 1(1), Feb. 1985, p. 2 - 3.

Here are some additional important references.

For a great many more references, see T. E. Bearden, "Tesla's Electromagnetics and its Soviet Weaponization," Proceedings of the Tesla Centennial Symposium, Colorado College, Colorado Springs, Colorado, Aug. 9 -12, 1984. (Available from the International Tesla Society: Contact Toby Grotz, 2230 West 35th Ave., Denver, CO 80211.). See also the author's publications from the Tesla Book Co., 1580 Magnolia, Millbrae, CA 94030. See also The Emerging Energy Science: An Annotated Bibliography, eds. T. E. Bearden and Andrew Michrowski, available from the Planetary Association for Clean Energy, 100 Bronson Ave., Suite 1001, Ottawa, Ont. K1R 6G8, Canada.

AFTERWORD

There is a special time bomb ticking away for all of humanity. For the first time, the total destruction of our entire biosphere -- and perhaps our entire solar system -- is only moments away from the finger on the trigger (or from a simple accident). Our world grows more hostile to us day by day. The world is already at war, and simply has not yet admitted it.

We have within our grasp the final technology. It is a two-edged sword of nearly unlimited power. We can overcome the cosmos, and conquer physical reality itself -- or we can utterly destroy ourselves and our planet. From the tree of knowledge, we have eaten the final fruit that deals with this physical world. We can mold our physical reality as we will, and make of it a utopia or a hell.

Yet in his blindness and ruthlessness, man has now weaponized the very dynamos that run the cosmos. For grubby ideas and lust for power, we have opened the gates of hell incarnate. Our total destruction is held back -- momentarily -- by a tenuous and frayed thread. We are a heartbeat away from annihilation.

In the meantime, this information has been released in an attempt to galvanize our system into action, develop defenses, and buy some precious time.

But even if we also develop these weapons for defense, with the ordinary thinking Man seems capable of, the end is still inevitable. Delayed a bit, but inevitable. The Russians are not madmen; they do not wish to destroy the earth, but only to conquer it. From a position of U.S. strength, an agreement can be made with the Russians to keep the lid on as far as we are concerned.

But what about other fanatics and madmen? What happens when they get these relatively cheap but incredibly powerful scalar weapons? What do you do about a regime composed of fanatically dedicated persons who believe that glorious death -- even of all of them -- would immediately propel them to the divine kingdom?

Some lunatic -- a mad dictator, perhaps -- is going to hurl these things indiscriminately and feverishly for silly ideas boiling fiercely in his fanatical brain. When he throws one that tickles the Sun and the Moon under the chin in the wrong manner, it's curtains for us all. They will simply lash back and generate Earth convulsions of a fury unparalleled in the last 3 billion years.

Regardless of what we do or attempt, as it now stands, sooner or later that scenario is inevitable. The total destruction of humanity is already a foregone conclusion, unless we find something totally different with which to reach all humankind.

Where is the new nonphysical knowledge that can save us from the precipice? What can we do to escape the end of humanity and the destruction of this heart-achingly beautiful planet?

The old ideas and clichés have reached their boundary. The system, defenses, acquisition of the weapons -- these alone cannot save us. Force of arms -- even these fantastic arms -- can no longer secure us. That which can be overcome at will cannot provide defense against the determined assailant.

Fortunately, given the precious time that developing U.S. scalar defenses will buy, there is a solution to the new problems. There is a way to prevent the total destruction of humanity. There is a thin ray of hope.

But that is another story, for another time and another place.

"It would of course be a great step forward if we succeeded in combining the gravitational field and the electromagnetic field into a single structure. Only so could the era in theoretical physics inaugurated by Faraday and Clerk Maxwell be brought to a satisfactory close."

Albert Einstein

"Don't keep forever on the public road, going only where others have gone. Leave the beaten track occasionally and dive into the woods. You will be certain to find something you have never seen before..."

Alexander Graham Bell

"Someday, after we have mastered the winds, the waves, the tides and gravity, we shall harness for God the energies of love. Then for the second time in the history of the world man will have discovered fire."

Teilhard de Chardin

ADDITIONAL NOTES AND REFERENCES

1. Nikola Tesla, "The Problem of Increasing Human Energy," Century magazine, June 1900, p. 208-209. In this article Tesla spoke of using standing waves to produce distant effects and locate objects such as ships. At this point he was thinking of a scalar radar locator, something more advanced than even our radar today. It was also capable of producing electrical effects at any part of the globe. To quote: "Stationary waves... mean something more than telegraphy without wires to any distance... For instance, by their use we may produce at will, from a sending station, an electrical effect in any particular region of the globe; we may determine the relative position or course of a moving object, such as a vessel at sea, the distance traversed by the same, or its speed..."

2. Nikola Tesla, "The True Wireless," Electrical Experimenter, May 1919, p. 87.
3. T. E. Bearden, Comments on the New Tesla Electromagnetics: Part I: Discrepancies in Present EM Theory, Tesla Book Co., 1580 Magnolia, Millbrae, CA 94030, 1982.
4. T. E. Bearden, Toward a New Electromagnetics: Part III: Clarifying the Vector Concept, Tesla Book Co., 1580 Magnolia, Millbrae, CA 94030, 1983.
5. T. E. Bearden, Toward a New Electromagnetics: Part 4: Vectors and Mechanisms Clarified, Tesla Book Co., Millbrae, California, 1983, p. 6, 39.
6. T. E. Bearden, Solutions to Tesla's Secrets and the Soviet Tesla Weapons, Tesla Book company, 1981
7. T. E. Bearden, Tesla's Secrets and the Soviet Tesla Weapons, 1 hr. 40 min. videotape, Weather Engineering, POB 1472, Huntsville, AL 35807, 1981.
8. T. E. Bearden, Soviet Weather Engineering Over North America, 1-hr. videotape, Weather Engineering, POB 1472, Huntsville, AL 35807, 1985.
9. T. E. Bearden, Star Wars Now! The Bohm-Aharonov Effect, Scalar Interferometry, and Soviet Weaponization, Tesla Book Co., 1984
10. Stefan T. Possony, "The Tesla Connection," Defense & Foreign Affairs, Aug. 1984, p. 12-14, 27.
11. Stefan T. Possony, "Psy-War: Soviet device experiment," Defense & Foreign Affairs Daily, 12(104), June 7, 1983, p. 1-2. Reports on Dr. Ross Adey's investigation of the Soviet LIDA device which is used to bombard human brains with radio waves in the 40 MHz region. Also reports on work by A. S. Davydov of the Ukrainian Academy of Sciences, who discovered how the blood-brain barrier can be penetrated by low-frequency radio waves so that brain cells are affected.
12. Fritz Albert Popp, "Photon storage in biological systems," in Electromagnetic Bioinformation: Proceedings of the Symposium, Marburg, Sep. 5, 1977. Edited by Fritz Albert Popp et al, Munchen, Wien, and Baltimore, 1979, p. 123-149. Dr. Popp has discovered, both theoretically and experimentally, that mitogenetic radiation from cells can be seen as a sort of "waste" from a virtual electromagnetic field with a high coherence. This field has a tendency to become stationary over the whole organism. In addition, it includes the storage of "virtual" coherent photons. (In other words, there is a master EM field with high coherence, stationary over the whole body. This is the cells' master control system. Storage of virtual photons -- i.e., scalar signals -- occurs in this field.).
13. To gain an appreciation of the Aharonov-Bohm effect, see Y. Aharonov and D. Bohm, "Significance of Electromagnetic Potentials in the Quantum Theory," Physical Review, Second Series, 115(3), Aug. 1, 1959, p. 485-491. For an exhaustive discussion of the Aharonov-Bohm effect and a large number of references, see S. Olariu and I. Iovitzu Popescu, "The quantum effects of electromagnetic fluxes," Reviews of Modern Physics, 57(2), April 1985. See also Bertram Schwarzschild, "Currents in normal-metal rings exhibit Aharonov-Bohm effect," Physics Today, 39(1), Jan. 1986, p. 17-20.
14. For details of the mysterious explosions of six major Soviet missile ammunition storage sites in seven months, see photograph, Jane's Defence Weekly, 2(3), July 28, 1984, p. 92; see also Mark Daly, "Goa and Goblet SAMs in Severomorsk explosion," Jane's Defence Weekly, 2(6), Aug. 18, 1984, p. 224; Derek Wood, "Soviets' northern fleet disabled... 'not viable' for six months," Jane's Defence Weekly, 2(1), July 14, 1984, p.3; Derek Wood, "Six explosions in the past seven months," Jane's Defence Weekly, 2(1), July 14, 1984, p. 3; John Moore, "The aftermath of Severomorsk," Jane's Defence Weekly, 2(6), Aug. 18, 1984, p. 224.
15. For details of the mysterious, instant deaths in Afghanistan, see Yossef Bodansky, "Soviets testing chemical agents in Afghanistan," Jane's Defence Weekly, 1(13), Apr. 7, 1984, p. 508.
16. For details of the Enhanced-V cloud signature of severe weather, see Gary Ellrod, "Dramatic examples of thunderstorm top warming related to downbursts," National Weather Digest, 10(2), May 1985, p. 7-13; T. J. Fujita, "Manual or Downburst Identification for Project Nimrod," SMRP Research Paper No.156, University of Chicago, 1978; D. W. McCann, ., "The Enhanced-V: A Satellite Observable Severe Storm Signature," Monthly Weather Review, 111, 1978, p. 887-894.
17. For a good discussion of the modern view of the vacuum, see I.J.R. Aitchison, "Nothing's plenty: The vacuum in modern quantum field theory," Contemporary Physics, 26(4), 1985, p. 333-391.
18. For a discussion of the ring interferometer experiments related to quantum and gravitational effects, see G.E. Stedman, "Ring interferometric tests of classical and quantum gravity," Contemporary Physics, 26(4), 1985, p. 311-332.

19. For information on self-induced transparency with pulsated light, see E. L. Hahn, Scientific American, June 1967. This is a scalar EM effect. The phenomenon is observed only in insulators, not in conducting materials. A dielectric tends to stop the flow of electrons, thus stopping the bleed-off of the Kaluza-Klein 5-potential as EM force fields. Thus through the insulator or dielectric, an electrogravitational pulse is transmitted. When this pulse emerges from the other side of the dielectric, then electrons are free to move again and form ordinary EM fields, resulting in resumed EM bleed-off of the KK (Kaluza-Klein) 5-potential. Thus ordinary photons strike the dielectric, changing into electrogravitational waves which transit the opaque dielectric, and these EG waves transform back to EM waves on the far side of the dielectric. Advanced scalar EM application of this effect can make an object optically invisible.

20. For a lucid and profound presentation of the entire subject of elementary particle physics and quantum field theory, see T. D. Lee, Particle physics and introduction to field theory, Harwood Academic Publishers, New York, 1967. Subjects covered include those at the forefront of current research. Chapter 16, "Vacuum as the source of asymmetry," is particularly important. Here Lee concisely covers the idea of degenerate vacuum states, vacuum structuring, and vacuum effects causing symmetry breaking (violation of conservation laws). An excellent coverage of asymmetries and observables is given on p.181-188. For example, whenever symmetry is spontaneously broken, a nonobservable (virtual entity) has become observable. Thus there exist mechanisms for the direct translation between virtual and observable states.

Most engineers are unaware that physics has already rigorously proven (both theoretically and experimentally) that conservation of energy can be physically violated, even by excitation of the vacuum.

However, in the present assumption of a randomized virtual microstructure of a vacuum potential, these broken symmetry effects are individually confined to very small microlevels. For example, on p. 383, Lee points out that the microscopic structure of the scalar vacuum field (i.e., of vacuum charge or "potential") is not utilized.

This of course is reasonable if all vacuum potentials used in particle physics are treated as having a randomized microstructure of virtual particle flux vectors. Since any appreciable directional coherence in such a randomized microstructure could persist only over extremely tiny distances, then the microstructure of vacuum degenerate states has negligible local effects in ordinary macroscopic systems.

In other words, these conservation violation effects would be very difficult to coherently capture and utilize to provide "free energy, emerging from the vacuum."

The randomized momentary coherences, however, are responsible for the violent microfluctuations of the EM fields, well-known in classical electrodynamics. An approach such as taken by Yater or Moray would be necessary to achieve a vacuum energy tap under such conditions. To achieve usable macroeffects, a very large collection of charge or magnetic material, etc. would be required before the probability of usable coherences would become sufficiently large. Therefore this area is neglected in practical physics and engineering.

However, this is precisely where scalar EM is lost in conventional theory and engineering practice. In scalar EM, the coupling together of macroscopic EM force field vectors into a summed zero system means that the vacuum potential's microstructure is now macroscopically ordered by that system. Further, it is sustained during translation through space. In such case, one has produced directional gravitational potential gradients that have macroscopic range and form. Further, by coherently varying the amplitude of the individual components of the zero vector system, a gravitational wave -- a controlled oscillation of the degenerate states or vacuum -- is produced. By processing the EM components, this gravitational wave can be narrowed, formed into a beam, and projected. Two such beams can be interfered, even at a great distance, producing G-interference and causing EM effects to emerge in the distant interference zone. Thus scalar EM profoundly affects quantum mechanics, quantum field theory, particle physics, general relativity, and electromagnetics.

21. For some strong and pertinent critique of present scientific bias, see Ruggero Maria Santilli, Ethical probe on Einstein's followers in the U.S.A.: An insider's view, Alpha Publishing, POB 82, Newtonville, MA 02160. Santilli is a highly published physicist and the editor of a refereed scientific journal, the Hadronic Journal. After lengthy attempts to correct injustices within the Scientific system, to no avail, he finally has gone public with his specific charges. Santilli references senior Russian physicist G. Yu. Bogoslovsky, whose 1984 paper "Generalization of Einstein's relativity theory for the anisotropic spacetime," whose research would have been impossible in the U.S. Quoting Santilli: "He would have been discredited, humiliated, and chased out of these institutions [Harvard, M.I.T., and Yale] beyond any reasonable doubt by ample documentation on similar cases." Again to quote Santilli: "Papers bearing the title of 'Generalization of Einstein's relativity' are routinely permitted with human dignity at Moscow University in the U.S.S.R., but they are absolutely inconceivable today at the departments of physics of Harvard University, of the Massachusetts Institute of Technology, of Yale University and of other similar institutions in the U.S.A., as numerous senior scientists would readily testify."

You see, dear reader, there has been a deep scientific conspiracy in the U.S. to prevent any change in the severe restrictions placed on general relativity by Einstein. This has reduced GR to a sort of "special relativity, with only distant perturbations." Specifically, it has excluded scalar electromagnetics and branded as heresy the inconceivable idea that general relativity could be local, and engineerable.

Now you know why the Soviets have been able to develop these monstrous weapons for over three decades while our scientists slept at the wheel. Scientific arrogance and pride has been our greatest enemy.

See also Bryan G. Wallace, "The great speed of light in space coverup," Scientific Ethics, 1(1), Feb. 1985, p. 2-3; "Radar testing of the relative velocity of light in space," Spectrosc. Lett. 2, 1969, p. 361; Wallace, "Letter to the editor," Physics Today, 36(1), 1983, p. 11; "Letter to the editor," Physics Today, 37(6), 1984, p. 15. See M.E. Ash et al, Astron. J., 72, 1967, p. 72. Direct experiments on Einstein's second postulate, in the 1961 interplanetary radar contact with Venus, challenge whether relativity is correct. Variations of over 30,000% of the best possible general relativity fit the MIT Lincoln Lab could generate were measured. The variations were not random but contained diurnal, lunar, and synodic periodic components. See also Bryan G. Wallace, Spectrosc. Lett. 4, 1971, p. 79 for an analysis of published 1961 data on the interplanetary radar contact with Venus that concludes that the data showed a component that was relativistic in the Galilean $c+v$ sense. See also Wallace, "The Unified

Quantum electrodynamic ether," Foundations of Physics, 3, 1973, p. 381. which details Measurements strongly challenging the Einstein assumption of the constant velocity of light, and deals with the nature of the ether. See also Thomas E. Phipps, Jr., "Critique of accepted theories of special relativity and electromagnetism," Scientific Ethics, 1(2), Apr. 1985, p. 17-23.

22. For a sample of Soviet scientific freedom from narrow-minded bias in general relativity, see V. I. Denisov and A. A. Logunov, "The inertial mass defined in the general theory of relativity has no physical meaning," Teor. i Matemat. Fizika, 51(2), May 1982, p. 163-170 (In Russian). See also A. A. Vlassov and V. I. Denisov, "Einstein's formula for gravitational radiation is not a consequence of the general theory of relativity," Teor. i Matemat. Fizika, 53(3), Dec. 1982, p. 406-418. Here we find that the intensity of gravitational radiation and the total intensity determined in the general theory of relativity in accordance with Einstein's formulas depend on the choice of the coordinate system, so that they can be made to vanish or even become negative. [Note by T.E.B.: If local curvature is engineerable, as in scalar EM, the local choice of coordinate systems can itself be directly engineered. This clearly implies that scalar EM can thus produce either "positive" intensity radiation or "negative" intensity radiation; thus it can "produce energy at a distance" or "extract energy from a distance.]"

Continuing with Denisov: This result is a particular consequence of the general assertion to the effect that in general relativity there are no energy-momentum conservation laws for a system consisting of matter and the gravitational field. [Note by T.E.B.: Thus we can have an energy source or energy sink appear in the distant interference region, where matter has been lifted from the Dirac sea and exposed to the highly nonlinear interfering EG fields.]. See also V. I. Denisov and A. A. Logunov, "New theory of spacetime and gravitation," Teor. and Matemat. Fizika, 50(1), July 1982, p. 3-76. Points out that "... the gravitational field in general relativity is completely different from other physical fields and is not a field in the spirit of Faraday and Maxwell." (p. 3, English version).

23. In the Proceedings of the Tesla Centennial Symposium, an IEEE Centennial Activity, Colorado College, Colorado Springs, Colorado, Aug. 9-11, 1984, see Richard A. Blade, "Modification of Maxwell's equations in free space to account for nonzero photon mass and scalar electromagnetic waves," p. 91-92; Jack Y. Dea, "Scalar fields: their prediction from classical electromagnetism and interpretation from quantum mechanics," p. 94-98; Robert W. Bass, "Self-sustained non-Hertzian longitudinal wave oscillations as rigorous solutions of Maxwell's equations of electromagnetic radiation," p. 89-90; T. E. Bearden, "Tesla's electromagnetics and its Soviet weaponization," p. 119-138.

24. To see the limiting assumptions imposed on general relativity that results in the severely restricted "ordinary general relativity" taught in almost all Western universities. see Charles W. Misner, Kip S. Thorne and John Archibald Wheeler, Gravitation, W. H. Freeman and Co., San Francisco, CA, 1973, p. 19-21, 71-72, 367-369. Among other things, these arbitrary restrictions save the conservation laws. When they are removed. the conservation laws can be violated.

25. Several anomalous events -- skyquakes, booms, or earthquakes -- have been documented in Europe. See H. W. Haak. "The Seismic event of November 9, 1983: Earthquake or sonic boom." Seismic Activity in Western Europe, (With particular consideration of the Liege Earthquake of November 8, 1983), Ed. by Paul Melchior, D. Reidel Publishing Co., 1985, p. 215-222. For such events in the United States, see S. Claflin-Chalton and G. J. MacDonald, "Sound and light phenomena," The Mitre Corporation, McLean, Virginia 22102, Nov. 1978.

26. Fundamental experiments were performed by Eotvos et al. in the early 1920s. See R.V. Eotvos, D. Pekar and E. Fekete, Ann. Phys. (Leipzig) 68, 1922, p. 11. Actually a fifth force of nature due to hypercharge may have been found by these experiments. See Ephraim Fischbach et al. "Reanalysis of the Eotvos experiment," Physical Review Letters, 56(1), Jan. 6, 1986, p. 3-6. See also F. D. Stacey and G. J. Tuck, Nature 292, 230 (1981); S. C. Holding and G. J. Tuck, Nature 307, 714 (1984); G. W. Gibbons and B. F. Whiting, Nature 291, 636 (1981); F. D. Stacey, in Science Underground, edited by M. M. Nieto et al., AIP Conference proceedings No. 96, (American Institute of Physics, New York, 1983, p. 285. See also S. H. Aronson et al, Physical Review Letters 48, 1982, p.1306; Physical Review D 28, 1983, p. 476, 495. Also, comparison of satellite and terrestrial determinations of the gravitational field constant reveals significant disagreement: see R. H. Rapp, Geophys. Res. Lett. 7, 1974, p. 35; Bull. Geod. 51, 1977, p. 301.

27. John J. A. O'Neill. "Tesla cosmic ray motor may transmit power 'round the earth: Famed scientist, on eve of 76th birthday, says he has succeeded in harnessing 'penetrating rays' to operate small motive device." Brooklyn Eagle, July 10, 1932. Tesla reported he had harnessed "cosmic rays" and caused them to operate a small motive device. Tesla's use of "cosmic rays." however, encompassed scalar EM radiation. Tesla later seems to have progressed to a simpler motive unit. In the Kansas City Journal-Post, Sep. 10, 1933, he stated: My power generator will be of the simplest kind -- just a big mass of steel, copper and aluminum, comprising a stationary and rotating part, peculiarly assembled." A similar type of "gravitational turbine" seems to have been invented by John Bedini.

28. To see just how arbitrary and postulational are present "definitions" of mass and force, see Robert Bruce Lindsay and Henry Margenau, Foundations of Physics, Dover Publications, New York, 1963, p. 283-287. Note on p. 283 that a "field of force" at any point is actually defined only for the case when a unit mass is present at that point. Also see Richard P. Feynman, Robert B. Leighton, and Matthew Sands, The Feynman Lectures on Physics, Addison-Wesley, New York, Vol. 1, 1963, p. 2-4 for a definition of the electric field in the context of its potentiality for producing a force. This problem did not exist for the original foundation of electromagnetic force fields in vacuum, since the vacuum was assumed to be a material ether. With the modern view a nonmaterial ether has emerged, yet the classical electromagnetic theory has not been made sufficiently rigorous in distinguishing "observable" and "virtual" electromagnetic force fields.

29. E. P. Battey-Pratt and T. J. Racey, "Geometric Model for Fundamental Particles," International Journal of Physics, Vol. 19,

No. 6, 1980, p. 437-475.

30. Some years ago, Dr. William Tiller produced very important "free A-field" theoretical work which showed waves which did not fall off as $1/r^2$. Interesting theoretical work in scalar wave theory has also been advanced by Dea. See Jack Dea, "Fundamental Fields and Phase Information," presented at the 1985 U.S. Psychotronics Association Conference, Bergamo Center, Dayton, Ohio, July 1985. Dea has formulated an important theory for vacuum EM scalar waves, derived from Maxwell's equations with zero E and B fields. He predicts waves whose intensity falls off with distance as $1/r$ instead of $1/r^2$, and detection of these waves by various means. He shows simple generators for the waves. Detection is quantum mechanically by electron interference, not by single electrons. Thus such scalar waves will pass through normal Faraday shields. In his theory Dea does not address the question of spin vortexes in vacuum scalar waves. It is the present author's view that all vacuum waves are scalar waves, and the primary distinction between the "transverse" EM wave and the longitudinal scalar wave is simply the presence or absence of spin-vortexes. Indeed, one may argue that the present "vector wave" EM theory can be replaced by a scalar wave theory. In 1903 Whittaker proved that any vector field can be replaced by two scalar fields. See E. T. Whittaker, Proc. Lond. Math. Soc. 1, 367, 1903. By implication, since a vector wave is simply a moving vector field, it can be replaced by two moving scalar fields.

31. David Jones, "Israel's Secret Weapon," Weekend Magazine, Dec. 17, 1977.

32. John Hutchinson, private communication. Masses of wood, metal, etc. -- some weighing over 60 lbs. -- have been levitated by Hutchinson.

33. For a description and details of the April 9, 1984 incident off Japan, see Daniel A. Walker, Charles S. McCreery, and Fermin J. Oliveira, "Kaitoku Seamount and the Mystery Cloud of 9 April 1984," Science, 227(4684), Feb. 8, 1985, p. 607-611. See also transcription from Japan Airlines flight 036 to Anchorage International Flight Service, 9 April 1984, at 1406 Greenwich mean time, Federal Aviation Administration (FAA) — Alaska Region; Jim Derry, Special Agent, FAA-Alaska Region, interviews with Captain C.H. McDade, Japan Airlines Flight 036, with Captain Cornelis Vander Berg, KLM Royal Dutch Airlines Flight 868; with First Officer Reint Sol, KLM Royal Dutch Airlines Flight 868, and with Captain Mike Howe, Flying Tiger Lines Flight 078, Anchorage Daily News, 10 April 1984, p. A-1; Anchorage Daily News, 12 April 1984, p. A-1; Honolulu Advertiser, 10 April 1984, p. B-1; Newsweek, 30 April 1984, p. 25, Gregg Ripee, "Mushroom cloud sighted off Japan," Los Angeles Daily News, 11 April 1984, p. 1, 8; Ross Gelbspan, "Mystery cloud baffles scientists," Boston Sunday Globe, 13 Jan. 1985, p. 1, 14; T.E. Bearden, Soviet Weather Engineering Over North America, 1-hr. videotape, 1985. See also McKenna, Daniel L. & Daniel Walker, "Mystery Cloud: Additional Observations", Science, 234(4775), Oct. 24, 1986, p. 412-413.

34. For a description of the April 11, 1963 anomalous underwater explosion north of Puerto Rico, see Robert J. Durant, "An Underwater Explosion — or What?", Pursuit, 5(2), April 1972, p. 30-31.

35. For details of the loss of the U.S.S. Thresher and the interference experienced by the U.S.S. Skylark, see John Bentley, The Thresher Disaster, Doubleday, Garden City, N. Y., 1975, particularly p. 164. Some of the communications systems of the Skylark experienced temporary failure, but were not disabled, later resuming operation.

36. The Soviet Union has a well-established history of interfering with and destroying aircraft; for example, for a listing see "Soviet and Warsaw Pact air incidents," Jane's Defence Weekly, 3(2), Jan. 12, 1985, p. 58.

37. For details of the anomalous "nuclear flashes" detected by U.S. Vela satellites, see "Scientists Fail to Solve Vela mystery," Science, 207, 1 Feb. 1980, p. 504-506. "Satellite Evidence Shows 'possibility' of Nuclear Test, DOD Says," Aerospace Daily, Oct. 29, 1979, p. 286. "A Flash of Light," Newsweek, Nov. 5, 1979, p. 64-65. "Was It a Nuclear Device?", Newsweek, July 21, 1980, p. 19. "Diverging Views," Washington Roundup, Aviation Week & Space Technology, July 21, 1980, p. 15. Philip J. Klass, "Clandestine Nuclear Test Doubtful," Aviation Week & Space Technology, Aug. 11, 1980, p. 67, 69, 71-72. "Debate continues on the Bomb That Wasn't," Science, 209, 1 Aug. 1980, p. 572-573. "Navy Lab Concludes the Vela Saw a Bomb," Science, 209, 29 Aug. 1980, p. 996-997. See also Jack Anderson and Dale Van Atta, United Press Syndicate, "CIA knew South African-Israeli nuclear test was coming," Birmingham Post-Herald, Apr. 26, 1985, p. A5. The latter article repeats the CIA/DIA argument that the Vela incidents represent concurrent South African-Israeli testing of atomic weapons. Taiwan is considered a possible third partner. According to Anderson and Van Atta, a South African navy contingent was "in the area" at the time of the 1979 Vela detection, and Israel and South Africa were cooperating on an atomic bomb project as early as 1966. Apparently U.S. announcement of an impending South African atomic test in the Kalahari Desert in 1977 led to such an outcry that the test was suspended. Anderson and Van Atta cite succeeding visits to South Africa by Israeli scientists, technicians, and defense officials. However, since the actual Vela detections showed some deviations from what would be expected from nuclear tests, one can speculate that Anderson and Van Atta have presented evidence for the development of scalar electromagnetic weapons by two additional countries. One may further speculate that this could reveal what has been checking the Soviets from simply moving against the West with scalar electromagnetic weapons. Indeed, the mysterious destruction of six major Soviet missile ammunition storage areas within the space of seven months could have been a preemptive measure and warning to the Soviets if they had actually been considering moving against the West. Also, other incidents reported in the South Atlantic may possibly be associated with the program producing the "Vela flashes." For example, see N.W.C. Rutherford, "Unidentified Phenomena," Marine Observer, 51, 1981, p. 186 for a description of a great bluish-white flash and small bolt of lightning, indicating some sort of anomalous electrical discharge, on Dec. 23, 1980 at 2245 hours (10:45 p.m.). Many other anomalous flashes for which no known causative mechanism exists have been detected by satellites. For example, the OSO-2 and OSO-5 satellites have detected about one mysterious short (less than 0.1 sec) flash about every ten orbits, at times when the fields of view of the telescopes

were well above the earth. As many as three of the satellite's photometers have detected a flash simultaneously. These flashes must be removed from any discussion of satellite-observed lightning; see J. G. Sparrow and E. P. Ney, "Lightning Observations by Satellite," Nature, 232, 1971, p. 540.

38. For a description of sightings of enormous glowing globes of light deep within the Soviet Union in the direction of Saryshagan, see Gwynne Roberts, "Witness to a Super Weapon?", The Sunday Times, London, England, Aug. 17, 1980. Several incidents were observed by Downie and others.

39. For an artist's conception of a directed energy weapon installation at Saryshagan, see Aviation Week & Space Technology, July 28, 1980, p. 48. For a DOD sketch, see Soviet Military Power, 1985. Obviously classically-trained U.S. military analysts, with no knowledge of scalar interferometry, have not considered the installation as a candidate hyperspatial howitzer.

40. For a description of multiple pilot sighting (from Iran) of an enormous glowing globe of light deep within the Soviet Union, see Central Intelligence Agency (CIA) Information Report No. CO-B-321/15354-66, "Sighting of Unusual Phenomenon on Horizon Near Iranian/USSR Border," Sep. 8, 1966, released on 15 Dec. 1978 under the Freedom of Information Act (FOIA). The sighting occurred at 2142 hours (9:42 p.m.).

41. For details of sighting of the intensely glowing ball of light near British European Airways flight 831 between Moscow and London, see CIA Foreign Intelligence Information Report CO-B-324/33601-76, "Aerial observation of intense Source of Light," Nov. 18, 1976, released on 15 Dec. 1978 under the FOIA. The incident occurred between 1800 and 1900 hours (6:00-7:00 p.m.). The light was observed for 10-15 minutes, until the aircraft had flown past and left the light behind.

42. For other examples of pertinent light phenomena: F. S. Angus and G. Carling, "Optical Phenomenon: Caribbean Sea; Western North Atlantic," Marine Observer, 40, Jan. 1970, p. 17-18; R. A. Holmes, "Unidentified Phenomenon, off Barbados, West Indies," Marine Observer, 40(229), July 1970, p. 107-108; H. K. Dyer, "Unidentified Phenomenon: Western North Atlantic," Marine Observer, 43, July 1973, p. 114. For a 1961 double concentric hemispheric shape observed in the Indian Ocean, see Marine Observer, 32, 1962, p. 64. For a particularly significant combination of forms, see Marine Observer, "Unidentified Phenomenon," 48, 1978, p. 21-22. Also, on the night of July 26, 1984 the pilot and crew of a Boeing 747 (American carrier) flying from Tokyo to Fairbanks, near the Kuril Islands, at 47°54' N: 161°00'05" E, noticed a slowly expanding hemisphere of white light off to their left above the horizon. The shell of light continued to expand over a 10-minute period until ahead of them and to the right. The crew braced for a shock wave which never arrived. Their weather radar saw nothing out of the ordinary. The shell of light had sharp edges and was semi-transparent so that stars became visible through it. (Richard F. Haines, private communication, Sept. 27, 1984). See also Richard Hall, "Aerial anomalies at sea," The Info Journal, 4(3), May 1975, p. 6-9 for an unusual light phenomenon seen in the Caribbean by the R.M.S. Carmania (British). The phenomenon occurred four times at precise hourly intervals, strongly suggesting an artificial origin. See also F. Shepherd, "Cloud: Strait of Gibraltar," Marine Observer, 51(273), July 1981, p. 107-108 for an incident of associated cloud, arch, and anomalous pressure effects. For another significant airline sighting by Japan Airlines flights 403 and 421 of a giant, expanding globe of light on June 18, 1982, in the North Pacific, 100 km. east of Kushiro, see the Asahi Evening News, Tokyo, Japan, June 22, 1982. For additional evidence that nomadic tribesmen passing through Kazakhstan repeatedly observe such gigantic light phenomena in close association with Saryshagan missile test range, and that Soviet deception planners foster the notion of "UFO activity" as a Red Herring, see Robert Jackson, "KGB takes to the flying saucers!", Northern Echo, Darlington, England, March 15, 1984.

43. For details of Khrushchev's announcement of a Soviet superweapon, see Max Frankel, "Khrushchev Says Soviet Will Cut Forces a Third; Sees 'Fantastic Weapon'", New York Times, Jan. 15, 1960, p. 1.

44. See Christopher S. Wren, "Brezhnev Calls for Accord against 'Terrifying Arms,'" New York Times, June 14, 1975, p. 1, 11. In a major Kremlin speech on June 13, 1975, Leonid I. Brezhnev included a statement that one major concern not covered by existing agreements was "assuming ever greater urgency with each passing day." Calling for a ban on new weapons of mass destruction, the Soviet leader stated: "The level of modern technology is such that a serious danger arises of creating weapons more terrifying than nuclear ones." He stated, "The reason and conscience of humanity dictate the necessity of erecting an insurmountable barrier to the development of such weapons." See also Malcolm W. Browne, "Senatorial Group Received by Brezhnev," New York Times, July 3, 1975, p. 2. Leonid Brezhnev repeated his proposal to a group of U.S. senators on July 2, stating that the capability to develop more terrible weapons was obvious. He emphasized, however, that he "had no particular weapon in mind." Here he may have been deliberately misleading the U.S. senators, to prevent revealing that the Soviet Union had already developed such weapons, and was horrified at their potential for total destruction. E.g., if massive and rapid scalar explosions occur, the linearity of spacetime -- and the orderly flow of time itself -- may be seriously perturbed throughout the earth and its adjacent space. From a general relativistic viewpoint, such an event might well prove catastrophic for the entire biosphere. Boris N. Ponomarev, a Soviet national party secretary, again raised the same issue to a delegation of visiting U.S. congressmen in the Kremlin on Aug. 11, 1975; see Christopher S. Wren, "Moscow Now Pressing Disarmament," New York Times, Aug. 12, 1975, p. 6. At the United Nation's thirtieth session of the General Assembly on Sept. 23, 1975, Foreign minister Andrei A. Gromyko strongly raised the same issue, warning that science can produce "ominous" new weapons of mass destruction. He urged that all countries, led first by the major powers, should sign an agreement to ban the development of these unspecified new weapons. He even offered a draft, entitled "Prohibition of the Development and Manufacture of New Types of Weapons of Mass Annihilation and of New Systems of Such Weapons." The first article provided that the types of these new weapons would be "specified through negotiations on the subject." Because of its fixation on nuclear weapons, the West may have lost its only opportunity to prevent the spread of scalar electromagnetic weapons of power unprecedented even by nuclear arms. Of course, it may also have been a Soviet ploy to prohibit the U.S. from developing scalar electromagnetics defensive

weaponry to counter the massive strategic scalar electromagnetics weapons already developed, tested, and deployed by the Soviet Union. Certainly in 1973 at a secret meeting in Prague with European communist leaders, Brezhnev had laid out a firm statement of Soviet domination of the world by 1985. See "Secret Speech: Did Brezhnev Come Clean?", National Review, 29(8), Mar. 4, 1977, p. 248, 250. Brezhnev's speech contained statements such as: "We are achieving with detente what our predecessors have been unable to achieve using the mailed fist...come 1985 we will be able to extend our will wherever we need to." Brezhnev stated the Soviet Union would control the oceans of the world, 90% of the land, and the air and space above. A front-page Boston Globe article on Feb. 11, 1975 was the first to carry the story. A copy of Brezhnev's secret speech was obtained by British intelligence in 1973, but denigrated by Secretary of State Kissinger. Apparently the first official U.S. reference to Brezhnev's startling speech did not appear until the 1976 National Intelligence Estimate. Although the big intelligence bureaucracies can do a fantastic job with "current intelligence," their record at predicting a drastic change is woeful, precisely because of the political nature of bureaucracies. See "What is Intelligence," Colonel William V. Kennedy et al, Intelligence Warfare: Penetrating the Secret World of Today's Advanced Technology Conflict, with an introduction by Dr. Ray S. Cline, Crescent Books, New York, 1983, p. 8-23. Intelligence Warfare is heartily recommended as the single book which best gives the reader a grasp of modern technical intelligence organizations, capabilities, and operations.

45. For details of Soviet weather engineering operations over the U.S., see Thomas E. Bearden, "USSR: New beam energy possible?", Defense & Foreign Affairs Daily, 13(111), June 12, 1984, p. 1-2. Cloud signature patterns reported in the article have been repeatedly sighted over multiple areas in the U.S. A series of anomalous "hole in the cloud" patterns, possibly associated with early Soviet weather engineering efforts over the U.S., was widely seen in 1967-68. See Weatherwise, 21(4), Aug. 1968, cover and p. 143; 21(5), Oct. 1968, p. 194-195, 204-205; 21(6), Dec. 1968, p. 238-245. Peculiar stationary blocking patterns have also been observed to occur and influence weather over the U.S., leading to severities such as the winter of 1976-77. See K. K. Tung and R. S. Lindzen, "A theory of stationary long waves, Part 1, A simple theory of blocking; Part 2: Resonant Rossby waves in the presence of realistic vertical shears; Part 3, Quasi-normal modes in a singular waveguide," Monthly Weather Review, 107(6), June 1979, p. 714-774. See also T. E. Bearden, Soviet Weather Engineering Over North America, videotape, 1985 for an expose or the physics and some major incidents of major Soviet weather engineering, including details and photographs of cloud signature patterns. See also C. B. Baker, "Soviet Weather Mayhem," Youth Action News, Nov. 1983, P.O.B. 312, Alexandria, Virginia 22313, p. 1-8; C. B. Baker, "Diabolic Soviet Warfare," Youth Action News, Nov. 1984; For a conventional Soviet look at weather modification (possibly intended to mislead the West), see E. T. Protasevich, "Microwave weather modification," Soviet Technical Physics Letters, 7(3), March 1981, p. 114-115. For a downburst mechanism, see Gary Ellrod, "Dramatic examples of thunderstorm top warming related to downbursts," National Weather Digest, 10(2) May 1985, p. 7-13. See Art and Kay Westermann, Weather War — Worldwide, Liberty Bell Books, POB 288, Sedona, Arizona 86336, 1983. See also U.S. Senate Resolution on Environmental warfare, July 11, 1973.

46. For details of the Soviet Woodpecker beams bending around the earth and intersecting over the U.S., see Christopher Chant and Ian Hogg, Nuclear War in the 1980's?, Harper & Row, New York, 1983, p. 71. See also Soviet Military Power, U.S. Department of Defense, 1985, p. 45. The intersection forms an interference grid. Scalar EM channels added to the Woodpecker carriers then provide a corresponding scalar EM interference grid in the scalar area.

When adjusting the scalar interferometry components of the grid, bursts in the interference and discharges of energy as well as bursts of energy extractions occur. This leads to the production of anomalous aerial phenomena such as explosions, rumblings, airquakes, etc. In addition, direct Bohm-Aharonov forces may be engendered in ground structures, shaking buildings and windows, etc. without seismic disturbances. Such anomalous disturbances have been widely noted in the open U.S. press. E.g., particularly see Kenneth F. Bunting and Daniel M. Weintraub, "Mysterious Rumbles Jar Southland," Los Angeles Times, Dec. 8, 1984, CC(II), p. 1,10; Let Scarr, "People shook up over mystery shakes," The San Diego Union, Dec. 8, 1984, p. B1, 4. Following this and a Dec. series of anomalous aerial disturbances off the Los Angeles/San Diego coast, a sharp and unexpected weather front appeared, racking the area with high winds on the night of Dec. 12, producing widespread damage and power outages. The newly-formed front moved on to produce significant snowstorms in other areas. See Ted Thackery, Jr., "Winds Kill Two, Wreak Havoc as They Sweep Through the Southland," Los Angeles Times, Dec. 14, 1984, MF/Part II, p. 1,8; "Even Tucson gets snow in storm that dumps 20 inches," AP release, Los Angeles Herald Examiner, Dec. 14, 1984, p. A-12. During several months prior to the December 1984 Los Angeles incident, anomalous electrical failures and outages had occurred in the San Diego and Southern California area, possibly due to scalar interferometry adjustments in the Woodpecker grid over the area. For other typical incidents possibly associated with adjustment of the interference grid, see "Who boomed? Odd Noise unnerves Ohioans," Journal, Milwaukee, Wisconsin, Dec. 28, 1982; "Tremors shake Miss. Gulf Coast," Times-Picayune, New Orleans, Louisiana, Feb. 27, 1983; Sandra Skowron, "Sonic boom is just Mother Nature," Beaver Co. Times, Beaver Falls, Penn., Jan 13, 1983; "Booms in Rockland," New York Times, Mar. 1, 1979, Sec. 8, p. 82; "Loud 'boom' unexplained," Star-Beacon, Ashtabula, Ohio, Feb. 21, 1983; Paul Senecton, "The word is now IDENTIFIED," Mail, Hartlepool, England, Feb. 3, 1985: On Jan. 23, 1974 a mysterious explosion over North Wales rocked a 60-mile radius area. Associated anomalous light phenomena were also seen. Hundreds and hundreds of anomalous booms, aerial rumblings, and aerial explosions, many accompanied by flashes or anomalous shaking of ground structures, buildings, windows, etc., have occurred over the U.S. and other Western nations in the 60's, 70's, and 80's.

On occasion, an aircraft at the proper altitude and position can conceivably experience interference in its electrical systems and in its engine combustion processes due to exothermic kindling or endothermic extraction of electromagnetic energy. The combustion processes of aircraft engines produce highly ionized gases in very nonlinear conditions. These can act as strong dephasers and decouplers of the vector EM components of a vector zero summation in a scalar interference zone. Exothermic interference would have little effect on combustion, but strong endothermic interference can result in engine flameout. Anomalous simultaneous failure of jet and propeller-driven aircraft engines sometimes occurs. For high altitude grids, this can result in engine

flameouts, but restart and recovery after unusual loss of altitude has dropped the aircraft out of the scalar interference zone. Several candidate incidents over and near the U.S. exist, particularly where power failures were experienced by multiple aircraft. The more usual exothermic case, however, if substantial could result in anomalous loss of control of the aircraft. For a recent candidate incident, see "Jetliner drops 32,000 feet; 400 aboard; 50 are injured," Associated Press release, Huntsville Times, Feb. 20, 1985, p. 1 and "China Airlines Pilot Denies Cockpit Error," Associated Press release, Huntsville Times, Feb. 21, 1985, p. A-9. Deliberate use of this effect as an anti-strategic-bomber weapon capable of destroying bombers at or shortly after takeoff is possible (the Arrow DC-8 which crashed just after takeoff from Gander Air Force Base, Newfoundland on December 12, 1985 may have been deliberately interfered with by just such a Soviet weapon – see extensive newspaper and TV news coverage of that event).

In scalar EM interference with aircraft, certain signatures may occur. Different instruments may sharply contradict each other, since their activation and inactivation is no longer a simple function. The pilot's instrument panel, for example, may indicate failure of the control system, when actually it has not failed, and the flight recorder may record that the control system is still operating. In such case, the pilot may take proper action based on his own instrumental readings, yet these actions may be contraindicated for the actual status of the aircraft, resulting in opposing pilot/autopilot actions. Tentative indications of the jetliner that anomalously dropped 32,000 feet and recovered are that apparently such anomalous instrument disagreements occurred. Another signature is that, as the EM charge accumulates in and on the aircraft, its skin charges up electrically, producing a glowing corona similar to St. Elmo's fire. The Arrow DC-8 was observed to be glowing yellow by eyewitnesses, according to the Canadian Broadcast Corporation's 10:00 p.m. network TV news on April 8, 1986.

47. T. E. Bearden, Star Wars Now! The Bohm-Aharonov Effect, Scalar Interferometry, and Soviet Weaponization, Tesla Book Co., Millbrae, California, 1984, p. 19-22.

48. For a paper possibly related to the first Bedini scalar wave detector from the "free A-field is a scalar field" view, see Robert R. Lewis, "Aharonov-Bohm effect for trapped ions," Physical Review A, 28(3), Sept. 1983, p. 1228-1235. This paper analyzes the role of the Aharonov-Bohm effect for the bound states of a charged particle in the superposition of two fields: a uniform magnetic field plus the vector potential of a solenoid. Gives exact solutions for a solenoid of zero size and discusses the corrections due to a solenoid of finite size. Shows that a series of new "betatron resonances" appear in the spectrum, dependent on the flux quantum number. The fundamental betatron resonance remains narrow and unshifted for solenoid radii large enough to broaden and shift the cyclotron resonance. See also W. Ehrenburg and R. E. Siday, Proc. Phys. Soc. London, Sect. B62, 1949, p. 8 which, among other things, discusses the effect of the vector potential in electron interferometry, where the insertion of a tiny solenoid between the interfering paths is shown to give an additional phase difference proportional to the flux through the solenoid. The resulting shift in the fringe system is called the Aharonov-Bohm effect.

49. Frank Golden has developed a most important and precise scalar EM detection system to display scalar EM signals on a cathode ray tube. His important measurements have mapped the scalar resonant frequency responses of the entire earth. Two completely different types of scalar instrumentation show precise agreement on the frequency maps. The measurements show that the Soviet Union has for some time entrained the entire earth into giant scalar electromagnetic resonances on two frequencies approximately 12 kilohertz apart. It is the opinion of the author that the beat frequency between these two giant resonances is utilized by the Soviet Union to extract enormous power from the earth, essentially by a mechanism that Golden has uncovered. A complex of four to eight weapon systems might reasonably be powered from the single bi-resonant tapping source. In April 1985 Golden discovered the rather sudden activation of many other scalar frequencies with characteristics resembling command and control communications. In addition, a significant number of additional paired scalar resonances had been entrained upon the earth. It is the opinion of the author that this showed a major activation of the Soviet strategic scalar electromagnetic defense system, with the power up of from 80 to 100 weapons, along with the complete command and control system. Golden has previously built a prototype of an actual Soviet scalar communications system and demonstrated that it works. Because of the impending mayday and the 1973 statement by Brezhnev indicating that 1985 was a critical planning year, the sudden activation of such massive numbers of weapons and communications was alarming. Accordingly, the author discreetly notified certain contacts to alert the U.S. system. Golden then detected the periodic turn-on and turn-off of the systems, indicating a large command and control exercise rather than preparations for direct tactical use. An additional difference, however, was the change from scalar electric to scalar magnetic field on many of the large transmitters. This is indicative of electrostatic location, targeting, and adjustment of the target on the earth and then switching to the "power input" mode. It is the opinion of the author that this indicated the choice of a geological target and proceeding to attack that geological target in the "slow buildup" mode. Again, proper contacts were so notified.

50. A very good coverage of the Soviet microwave radiation of the U.S. Embassy in Moscow is given in Paul Brodeur, The Zapping of America, W. W. Norton & Co., New York, 1977, passim. None of our U.S. Embassy security personnel knew of scalar interferometry, nor did they possess scalar electromagnetics detectors. Further, orthodox U.S. scientists were also ignorant of scalar electromagnetics. The Soviets were thus in a position to tailor the radiation signals and precisely determine what our on-site personnel would detect. Details of the effects on U.S. Embassy personnel, possibly associated with the microwave radiation, are given by Brodeur. A great number of related releases by the open news media also exist. For example, see Robert C. Toth, "Radiation Devices Bug U.S. Embassy," Huntsville Times, reprinted from the Los Angeles Times, Feb. 8, 1976; "U.S. Screening out Soviet 'Listening Rays'," United Press International release, Washington D.C. Star, Feb. 11, 1976; Norman R. Beebe, "Nixon Exposed to Radiation In Russia?," Associated Press release, Huntsville Times, Apr. 30, 1976; Barton Reppert, "U.S. Scientists Puzzled Over Embassy Radiation Effect," Associated Press release, Huntsville Times, May 28, 1976; Barton Reppert, "Radiation Entering Embassy in Moscow through Phone Line," Associated Press Release, Huntsville Times, May 28, 1976. See also Martin Ebon, Psychic Warfare: Threat or Illusion, McGraw Hill Book Co., New York, 1983.

51. For details of the electromagnetic transmission of cellular disease and death, see Vlail P. Kaznacheyev, "Information function of ultraweak light flows in biological systems," Problems in Biophysics, Novosibirsk, 1967, p. 7-18. Kaznacheyev et al, "Conditions necessary for appearance of distant intercellular interactions after UV-radiation," Bulletin Experimentalnoy Biologii i Meditsiny, (5), 1979, p. 468-471; Distant intercellular interactions in a system of two cultures connected by optical contact," Ultraweak Luminescence Biology, Moscow, 1972, p. 224-227; "Distant intercellular interactions caused by UV-radiation," Photobiology of a Living Cell, Leningrad, 1979, p. 221-223; "Studies on the biological role of electromagnetic emission as a factor of adaptive behavior of cells under conditions of latitude changes," Abstracts of the second all-union conference devoted to the problem of human adaptation to different geographical, climatic, and labor conditions, Novosibirsk, 1977, p. 101-104; Vlail P. Kaznacheyev, S. P. Shurin and L. P. Mikjhailova, "Distant intercellular interactions in a system of two tissue cultures," Official Bulletin of the committee on inventions and discoveries affiliated to the council of ministers of the USSR, Discovery no. 122 (19), 1973, p. 3, also printed in Psychoenergetic Systems, 1(3), Mar. 1976, p. 141-142; "Apparent Information Transfer Between Two Groups of Cells," Psychoenergetic Systems, 1(1), Dec. 1974, p. 37.

52. For evidence of anomalous scalar reflection out of the scalar grid caused by a Navy chaff drop, See "Navy sabotages traffic lights, TV sets," United Press International, PM cycle, Jan. 11, 1985; "Power blackout blamed on anti-radar particles," United Press International, AM cycle, Jan. 11, 1985; "Power Disrupted Briefly After Navy Plane Drops Metallic Strands," Associated Press, AM cycle, Jan. 16, 1985.

53. A good summary of the early incidence of the Soviet Woodpecker signals is given by Bradley Wells, "The Russian woodpecker: a continuing nuisance," CQ, Nov. 1984.

54. A particularly important Soviet Paper is E. B. Smetanin, "Electromagnetic field in a space with curvature – new solutions," Soviet Physics Journal, 25(2), Feb. 1982, p. 107-111. In this paper, a solution to the stated problem is obtained, which may be regarded as a classical model of a charged particle that has both a magnetic moment and a nonzero magnetic charge density. Interaction with spacetime curvature can disrupt the gauge invariance of the EM field, and it can also reestablish invariance in an initially noninvariant theory. (Hutchinson has had anomalous breaks of metal caused by standing scalar waves, which seems to be due to a mechanism that produces monopoles and deposits them in the metal at standing-wave nodes. This paper should be directly applicable.)

See also Yu. S. Vladimirov and A. A. Kozlenkov, "6-optics and a general theory of gravitation and electromagnetism," Soviet Physics Journal, 27(12), Dec. 1984, p. 1039-1041; V. G. Bagrov and M. D. Noskov, "New exact solution of the Dirac equation. XI," Soviet Physics Journal, 27(12), Dec. 1984, p. 1030-1034. See particularly V. I. Petukhov and I. A. Kuzin, "Weak processes in the field of a gravitational wave," Soviet Physics Journal, 27(12), Dec. 1984, p. 1025-1029.

In the latter paper it is significant that the decay probability increases in a locally curved spacetime, and that solutions are obtained for circularly polarized waves.

(In EM waves, circularly polarized waves have special characteristics in nonlinear isotropic media: exact solutions exist. Also, when two longitudinal sine waves of differing frequencies are transmitted into a nonlinear isotropic medium, the apparent difference frequency is transmitted as a sine wave, undistorted. This characteristic has been used by Westinghouse to produce improved sonar transmission through seawater, for example. The scalar EM (electrogravitational) wave may be represented as a longitudinal EM wave. Immediately, if one wishes to produce a pure scalar EG wave in the nucleus of an atom, two frequencies should be transmitted such that their difference is the frequency wished. Or circularly polarized waves may be utilized.)

Note that, by implication, one should be able to deliberately tailor scalar EM waves to greatly speed the decay of long-lived radioisotopes, such as are contained in radioactive wastes from nuclear reactors and other processes.

55. For some evidence of continuing persistence of the higher frequency scalar components applied to the scalar grid on Jan. 28, 1986 to localize the effects when attacking the Challenger, see "Poison suspected in unexplained deaths of birds," Huntsville Times, AP release, Feb. 6, 1986. From 1-4 Feb. 1986, various kinds of dead birds – such as blackbirds, cardinals, sparrows and bluebirds – plummeted to the ground in Birmingham, Alabama. At first some sort of mysterious poison was suspected, but later was ruled out. During this period, the woodpecker grid was particularly active in weather engineering operations. Multiple sightings of giant cloud radials occurred in various places throughout the U.S. The retention of the high frequency components possibly was intensified in the Birmingham area sporadically during the period. Birds flying into this zone would be killed if their brains acted as scalar receivers and were sufficiently jammed by the signals. Normally Huntsville (further north) is a "hinge point" for increased scalar activity, to start the Jetstream bending northeast to move along the Appalachian mountain chain. However, just before 28 January the jetstream had been diverted further south than usual by the Soviet interference, bringing unseasonably cold weather to Florida and the waiting Challenger on its launch pad. Probably hinge points further south than Huntsville were needed for this operation. If these more southern points were retained for a few days, and the high frequency components were retained, then an inadvertent high intensity area of these components may have sporadically occurred in the Birmingham area, killing the birds.

For description of the Apr. 18, 1986 Titan blast and its ramifications to the spy satellite program, see James Gerstenzang and Ralph Vartabedian, "Los Angeles Times News Service, "Titan Blast to Hurt Spy Program," Huntsville Times, Apr. 19, 1986.

56. For another very important paper indeed, see Vu. G. Ignat'ev, "Relativistic kinetics of an anisotropic plasmalike medium with damping in a field of gravitational radiation," Soviet Physics Journal, 27(12), Dec. 1984, (English translation: Plenum, June 1985), p. 1066-1069. If we substitute the vacuum "virtual plasma" for the observable plasma, this paper may be part of the smoking gun to show that the Soviet Union has developed scalar electromagnetics. Extrapolating from this paper, the amplitude of the "induced longitudinal field" is proportional to the square of the amplitude of the gravitational wave (GW) in an initially isotropic medium, but reduces to a linear proportionality as the medium develops nonlinearities (anisotropies or inhomogeneities). Whereas conventional GW are considered to be weak, the scalar GW may be very strong since we ourselves determine the variation in the energy density of vacuum it involves. Further, sharply spiked scalar EM (EG) pulses may develop appreciably more amplitude than the linearly calculated amplitude from the magnitudes of the zero-summation components. The end result is that (1) we can produce powerful gravity waves using the scalar EM approach, (2) local spacetime can be curved, producing violation of the conservation laws, and (3) the assumption of a local Lorentz frame made by Einstein as a limitation on ordinary general relativity is falsified.

In passing, note that immediately one also has a clear basis for the excess local production of energy when the battery furnishing power to a DC series motor is sharply spiked backwards in a "recharging" fashion. Further, the ions in the battery (which are several hundred thousand times as massive as an electron) possess a resonance on the order of 16 megahertz in a typical lead-acid battery. Under the correct conditions, the ions collect the excess energy (due to the initial square effect) produced by a sharp pulse of recharging potential. The ions are shocked into resonance and, on reversal, "overshoot" and deliver this excess energy to the plates, recharging the battery. Thus such a system can violate linear conservation of energy because spacetime is locally curved by the spiking, and excess energy from the excited local vacuum is collected by the ions and delivered to the plates. This is precisely the effect upon which the first Bedini free-energy motor depended. The timing and adjustment, however, are highly critical and difficult, and the battery takes a rather severe beating.

57. For details and photographs of highly anomalous exhausts seen on Bennett Island, see "Explosive Events Seen on Soviet Island," Aviation Week & Space Technology, Sept. 26, 1983, p. 31. NOAA-6 and NOAA-7 weather satellite photographs of massive smoke plumes, one of them 150 miles long and nearly horizontal, are shown. Also, in U.S. weather satellite photos of Novaya Zemlya, similar plumes have been detected, making this location a tentative candidate for a second Soviet "exhaust site." See also Letter John M. Miller, Geophysical Institute, University of Alaska, Jan. 4, 1985 with attachment, "Bennett Island plume cases recently found." Satellite photos showing actual circular breaking of arctic ice have also been taken near Wrangel Island. See Sam Bishop, "UA photos show Soviets break ice for missiles," Fairbanks Daily News-Miner, Dec. 15, 1984, p. 1,3; Craig Covault, "Soviet Ability to Fire through Ice Creates New SLBM Basing Mode," Aviation Week & Space Technology, Dec. 10, 1984, p. 16-17. Wrangel Island in fact has a bizarre history: it belongs to the U.S., but has been illegally given to the Soviets and occupied and used by them. For details, see "Wrangle over Wrangel and the Weather War," Don Bell Reports, 32(9), Mar. 8, 1985.

58. For details of anomalous blinding (probably by scalar EM means) of U.S. satellites, see Philip J. Klass, "Anti-Satellite Laser Use Suspected," Aviation Week & Space Technology, Dec. 8, 1975, p. 12-13. For details of anomalous failures and recoveries of a British satellite, see Joe Schwartz, Nature, 280, July 12, 1979, p. 95.

59. For other possible evidence of traces of Soviet scalar EM activity over the oceans, see George D. Curtis, "An electromagnetic radiation pattern over the ocean," Undersea Technology, 5(8), Aug. 1964, p. 29-30, 40. In producing a scalar wave, there exists a sort of "signal to noise" ratio of the desired scalar wave to an accompanying, undesired normal EM component. Due to practical equipment imperfections, the generated scalar wave inevitably is accompanied by a small residue of ordinary EM wave. While measures can be taken to further purify the scalar wave, a residue always remains. Curtis may have detected the weak EM residue accompanying early Soviet interference gridding for weather control testing over the U.S.

60. Interactions which occurred between Khrushchev and renowned physicist and Nobelian P. Kapitsa are of interest. Khrushchev desired absolute defense of the Soviet Union so that the Soviets might be able to launch any action desired without risk or serious concern. Kapitsa informed the Soviet leader that, if a means of total neutralization of foreign missiles was to be found, it could only come from a group of new principles in physics which was called "energetics." The term "energetics," of course, was contracted from "psychoenergetics," and is essentially the expanded physics/electromagnetics that this author has dubbed scalar electromagnetics.

Strangely, a portion of a book by Marshal Grechko was deleted from its English translation at the specific request of the Soviet Union to the U.S. State Department. The passage stated: "Of particular importance is basic research aimed at discovering still unknown attributes of matter, phenomena, and the laws of nature, and developing new methods for their study and use to reinforce the state's defense capabilities."

The most definitive Soviet book on military strategy is titled Military Strategy (Voyennaya Strategiya). See V. D. Sokolovskiy, Soviet Military Strategy, third edition, edited with an analysis and commentary by Harriet Fast Scott, Crane, Russak & Company, Inc., New York, 1975. There are three editions, the latest in 1968. In the third edition, the exotic weapons normally proposed for defense against strategic ballistic missiles -- such as particle beams, high energy lasers, exotic nuclear warheads, plasma weapons, antigravitational weapons, etc. -- are discussed and discounted by implication. The statement is made several times that 100% defense against missiles and aircraft is possible. A statement is also made that it is interesting to note that this capability (a solution to the strategic missile defense problem) has been achieved by the Soviet Union, but not by the West (e.g., p. 298.) In the same edition, a previous definition of antimissile defense obviously consisting of radars, computers, and interceptor missiles is deleted (see author's note 190, p. 454).

The Soviets also recognize the great importance of technical surprise: "The experience of war shows that warring sides quite often have tried to employ new types of weapons to this end to achieve surprise, which are a surprise for the enemy or are little known to him. Each side secretly develops new means of warfare in order to employ them unexpectedly. History knows many examples how the employment of a new weapon initially gave considerable success because the enemy, caught unaware and not knowing the combat capabilities of this weapon, was for some time incapable of effective counteraction... The mass introduction of new weapons into an army usually cannot remain secret for long for the other side. -- New means of warfare, and in mass numbers, are impossible to create often and quickly. In this regard, the sides have begun to take other paths concerning the attainment of surprise along with searches for new weapons and their sophistication." V. Ye. Savkin, of The Basic Principles Operational Art and Tactics, Moscow, 1972, U.S. Air Force translation, U.S. Government Printing Office, Washington, D.C. 20402.

61. The Soviets have not discarded most of their old radars, and have continued to develop, build, and deploy giant new radars (in apparent violation of SALT agreements), which U.S. analysts always analyze in conventional fashion. It is fairly straightforward, simple, and inexpensive to modify an ordinary pencil beam radar to produce scalar wave beams and geometrical scalar Fourier expansion forms. Radars can provide a wide array of totally new and unexpected capabilities when utilized in the scalar electromagnetics mode. Even older Soviet radars, with antiaircraft gun sites and older surface-to-air missile sites, will exhibit new and startlingly advanced capabilities against ballistic and cruise missiles and Strategic Air Command bombers. Since there are many thousands of these older Soviet radars still operationally deployed, in the scalar mode the Soviet strategic defense may well approach 100%, just as Military Strategy implies. Also, the antiaircraft and antimissile defense capability of Soviet land forces may be far greater than anything presently estimated by U.S. analysts.

62. To the physicists, engineers, and researchers who have made the tough sledding to this point, congratulations! Here's a bonus for you.

Turn to page 32, equation [7]. Time differentiate it (this is left as an exercise for the reader). Collect terms and study the result intensely.

Now you have the reason why rise time is so important from a scalar EM viewpoint. You can also see why spiking the innate inductance of any system very sharply is so important. Fast rise time greatly increases the value of the time derivative terms, and your gravito-inertial effects go up with the collective squares of your zero-vector summed components. Any system has at least a little inductance. For sharp spikes, the gravitational potential goes very high. The inductance of the system momentarily opposes any current (translation: opposes any current bleed-off, or EM force field bleed-off). During that time you've got the 4-space G-potential to use. If you need to hold it longer to use it, then increase the inductance.

Now you can see why extremely rapid discharge of properly tuned, giant Tesla coils give gravitational and inertial effects sometimes.

You can see why the sharp "EMP" (electromagnetic pulse) from a nuclear explosion or EMP generating device can penetrate the ocean.

That's why the spikes (such as used by the neurophone) can carry messages directly into the brain and nervous system. You also should see why the Soviet woodpecker carriers (a Soviet over-the-horizon radar system) are loaded with scalar EM spikes (Bedini has precisely detected them from 50 Hz to 10 MHz; Golden has detected them into the gigahertz range.) to work on the humans in the targeted area. They're zapping the hell out of us. And they have done something similar at the U.S. Embassy in Moscow for decades.

Bedini has developed a simple, cheap device to mess up the phaselocking of the scalar EM spikes on the woodpecker carriers. It's based on the fact that the Russkies use a lot of circularly polarized transmitters when they make the spikes. Here's what to do: Take 4 strong bar magnets and an old (but operational) long-playing record turntable. Set it on 33-1/3 RPM speed. Glue the magnets on the top of the turntable, standing vertically, symmetrically placed around the turntable's outer edge. Place them so that on one a north pole is up, on the next a south pole is up, then a north up, then a south up. Now turn the turntable on and let it run. This gadget makes a slowly rotating magnetostatic wave. (Yes, it will also make a rotating "magnetic" wave, which is actually two rotating magnetostatic waves.). These rotating magnetostatic waves will interfere with the scalar spikes, changing them to EM (electromagnetism) and slowly rotating their phase. This breaks the phaselock of the Soviet circularly polarized scalar EM signal on the human brain. This gadget will protect the average large room.

But back to our differentiated equation.

Now you should also see why the first Bedini motor is so "devilishly difficult" to adjust. You've got to get the effect and examine it in well under 20 nanoseconds. You'll need an oscilloscope of 350 MHz range or so. Microwave-quality bench equipment is necessary; the ordinary electrical and electronic shop equipment is not good enough. You can also see why the ordinary lead-acid battery takes such a beating. However, a special battery certainly can be designed to take it. Now you know.

Okay, you tigers. Go get 'em.

63. Now here's a final bonus for the persistent reader.

This time, see J. N. Brittingham, "Focus Wave Modes in Homogeneous Maxwell's Equations: Transverse Electric Mode," *J. Appl. Phys.* 54, 1983, p. 1179-1189; T. T. Wu and R. W. P. King, "Comment on 'Focus Wave Modes in Homogeneous Maxwell's Equations: Transverse Electric Mode' [*J. Appl. Phys.* 54, 1179 (1983)]", *J. Appl. Phys.* 56, 1984, p. 2587; T. T. Wu and H. Lehmann, "Spreading of Electromagnetic Pulses," *J. Appl. Phys.* 58, 1985, p. 2064-2065; T. T. Wu, "Electromagnetic Missiles," *J. Appl. Phys.* 57, 1985, p. 2370-2373. Pay particular attention to the latter paper.

Because of the Strategic Defense Initiative (SDI) and other programs, great interest has recently been kindled in using EM pulses to carry energy from a high-powered source to a target. However, so far almost all the work is still couched in terms of purely ordinary (though sophisticated) electromagnetics. It still involves the EM concept of "EM energy flow through the intervening space from the transmitter to the target." As such, the work to date still suffers from all the self-imposed ills and limitations of using the classical force fields concept of EM.

However, the theoretical work of these referenced papers is of great interest to us here.

In the first paper, Brittingham sparked a great deal of interest with theoretical work which promised a permanently focused 3-dimensional concentration of EM energy that propagates in a straight line with the speed of light. That is, this mode used a newly formulated wave packet (called the "focus wave mode") that acted as a non-dissipating EM soliton.

In the second reference, it was concluded that Brittingham's focused wave packet actually satisfied Maxwell's equations, but not the associated boundary conditions.

[Comment by this reviewer: both of these formulations use "linear time" and a "linear frame," ignoring the local general relativity aspects. Indeed, Brittingham's "focused wave packet" can be made by the zero-vector approach! However, it will not be an "EM" packet, it will be a pulse (or oscillating wave, depending upon how it is made) of 5-gravity potential. As such, it contains a multiplicity of locked-in, 5th-dimensional, non-zero EM gradients in and EM gradients out. Collectively these gradients themselves constitute a deterministic "flux of gradients" or an EM flux in the 5th dimension, with no resultant effective current of EM gradients. In other words, it's possible to build a "flux of gradients" and to have a "current of gradients," just as in ordinary EM it's possible to have a "flux of virtual particles" and a "current of virtual particles." The argument concerning the EM boundary conditions of Maxwell's equations is not relevant in such a case. The only boundary involved is the zero itself.]

Be that as it may, the 4th reference is of direct interest. In this paper, Wu has done us a great service. He shows that, under transient excitation, an antenna of finite size can transmit energy to a faraway receiver so that the energy decreases as slowly as one wishes. An electromagnetic pulse of energy with such slow decay is conveniently referred to as an "electromagnetic missile."

The electromagnetic missile has important applications, according to Wu. One possible application is the transmission of information in a manner that is very difficult to intercept or jam. A second possible application is to destroy or disable a distant target. However, Wu feels that so much energy is required [remember, he is speaking of EM non-zeroed force fields traveling through ordinary space] that a like1y radiating source must be something like a nuclear explosion. However, as Wu points out, a nuclear explosion produces a powerful EM pulse which includes frequencies from microwaves to gamma rays. To weaponize the explosion to produce a coherent beam, the nuclear explosion must be controlled to produce a coherent radiating source and a pulsed laser-like EM beam. Wu points out that such a technology is difficult and has not been developed.

We comment as follows: It is certainly true that enormous energy is required if the waves in the pulse remain electromagnetic -- that is, if they have non-zero resultant E and B fields to the external observer.

On the other hand, if we form a complex of waves in opposition so that we control the energy content of each individual component wave, but blend all the waves so that their collective envelope wave has zero E-field and zero B-field resultants, then -- to the external observer -- the EM energy is infolded and unzipped electromagnetically. It is now electrogravitational energy, and limitations of "EM force field energy flowing through space or through a physical medium" need no longer apply. However, we may still look at each EM component wave as an individual EM wave, moving in the Kaluza-Klein 5th dimension that is wrapped-around each and every point in our ordinary 4-space. In other words, to the ordinary 4-spacetime observer, each component wave has a special channel around every point of his space, not through it. Thus we have established multiple EM channels "just outside" each point of observer space. These we call "scalar channels," and EM energy can move through each one as if it were moving through a wire. The relative potentials between the "ends of each wire" determine in which direction the "EM energy current" flows along the wire.

And in each of these "special channels," we just have a normal kind of space (to the internal observer). Wu's paper assures us that we can get as much of the input energy to the distant target as we desire. The problem then is how to break the zero-summed EM envelope (and hence the "zero channel" for each component EM energy wave) in the distant target itself, spilling the infolded contents of all the special channels back into ordinary spacetime as EM energy (either positive or negative).

That, of course is easily done by interference in the distant zone. As previously stated, there is a way in which we can even perform this interference in a single scalar beam. Since the newly formed EM energy emerges from each and every increment of spacetime occupied by the distant target, it already emerges inside the very vitals of the target. It does not have to

translate through the intervening ordinary space between transmitter and target. Instead, it goes through the Kaluza-Klein fifth dimension. It translates along a line through our space, but not through our space. With the scalar EM approach, we transmit EM energy through hyperspace, not through normal space.

Hereafter we will adapt and expand Wu's SDI term "electromagnetic missile" to include these electrogravitational aspects. In other words, we include the "scalar EM missile", which consists of an infolded multiple of Wu's ordinary EM missiles moving together coherently in special sheathed hyperspace channels.

In Appendix I we show an anomalous photograph taken by Bob Gladwin, just before the shuttle launch of Nov. 26, 1985. While the photograph may be an artifact, it also is a candidate for the test strike of such a Soviet scalar "electromagnetic missile" tested against an aiming point offset from the shuttle launch which followed a few seconds later. The test was accomplished before the shuttle was launched, and offset from it, so that it positively would not endanger the shuttle itself. The conditions under which this spectacular photograph was taken happened to coincide with the special conditions required to photograph such scalar EM energy. Those conditions are clarified and explained in the Appendix.

My deep appreciation goes to Mr. Gladwin for allowing me to use this photograph. As we will point out in Appendix I, the video camera caught a picture of the Soviet scalar EM marker beacon associated with the Titan explosion of April 18, 1986. One can rest assured that the Soviets probably destroyed that vehicle, using a scalar EM missile.

Monstrous Nuclear Accident at a Soviet Facility in the Ural Mountains near Kyshtym

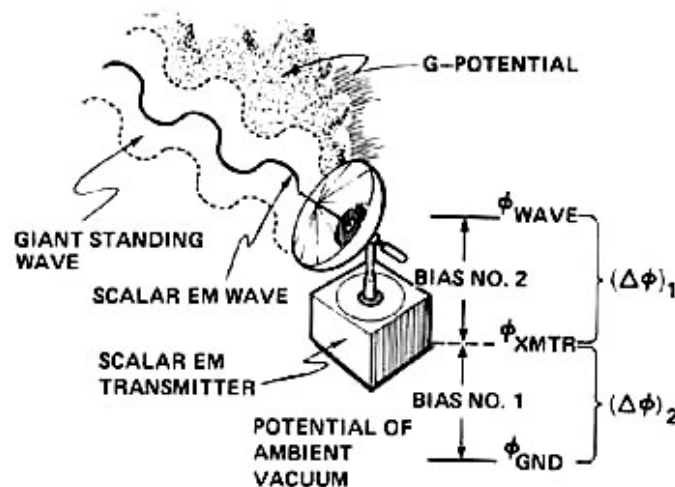


Figure 7. Bottled up energy in a standing scalar EM wave is a potential.

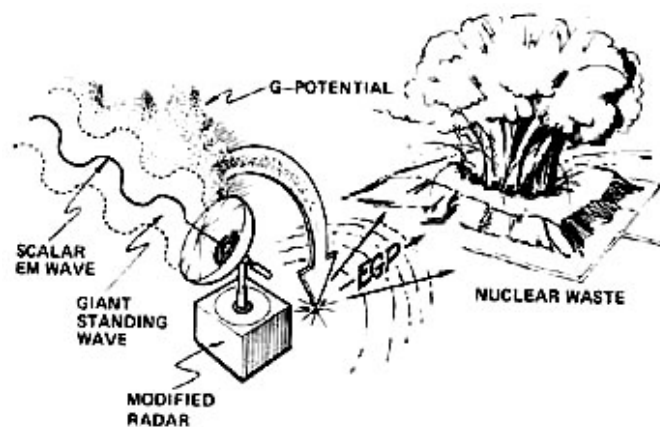


Figure 8. EGP short-out. Transmitter failure and consequent discharge of a giant standing scalar EM wave potential caused the explosion of stored nuclear wastes at Kyshtym, USSR, in the winter of 1957-58.

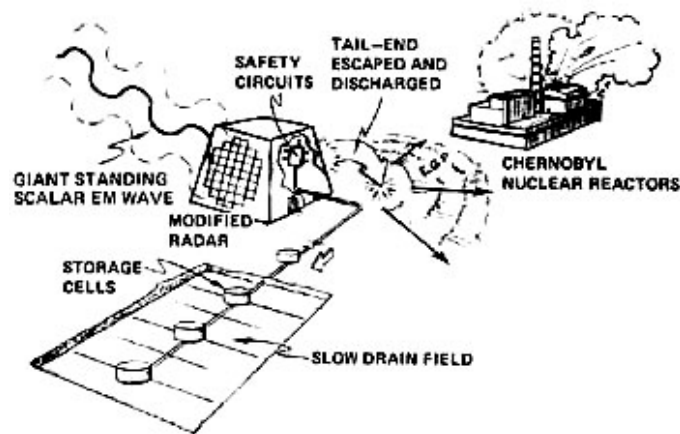
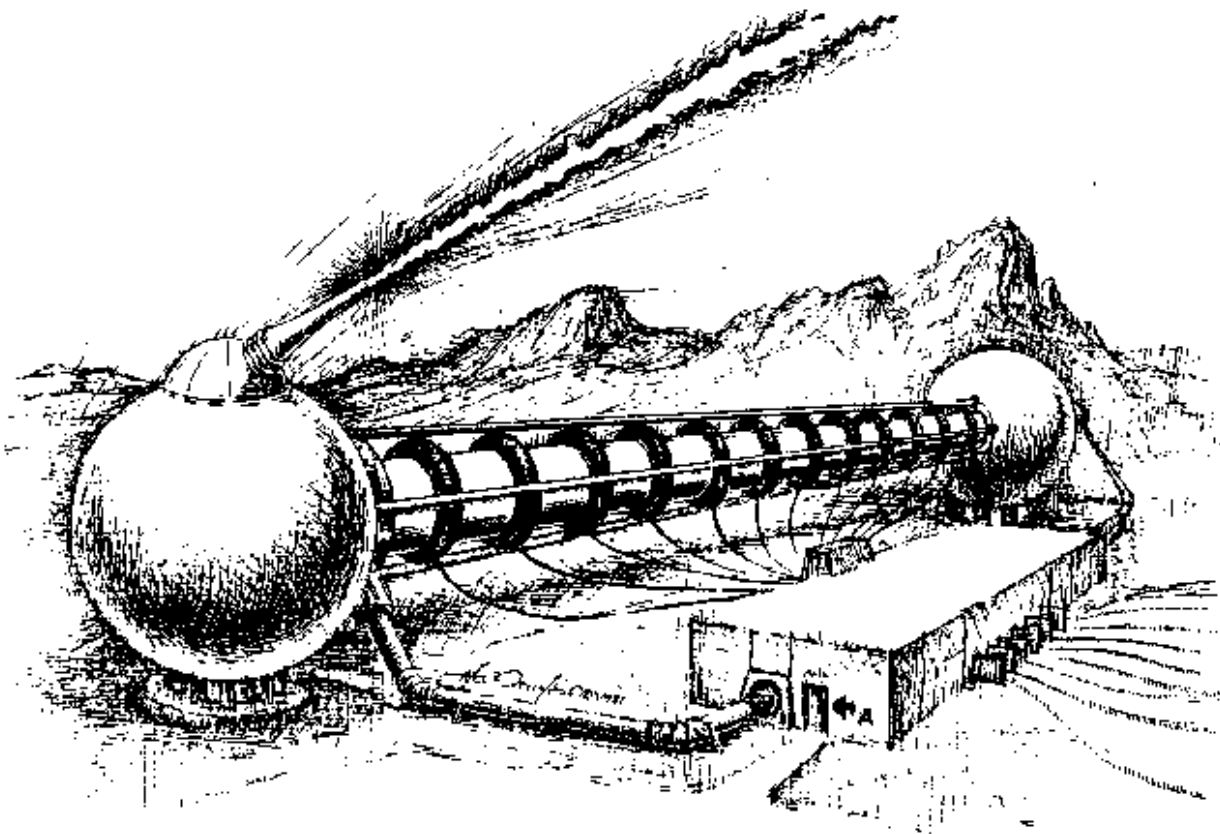


Figure 9. EGP initiation of the Chernobyl event. Failure of another giant transmitter near Chernobyl in 1986 eventually caused the eruption of one of the Chernobyl reactors by EGP-pulsing its nuclear fuel rods. When the transmitter failed, the alarmed Soviets shut down the four Chernobyl reactors while waiting for drain-off of the EGP potential by the safety circuits of the disabled transmitter. These circuits finally gave way, producing a mild EGP pulse into the earth. Had they failed immediately, all four reactors at Chernobyl would have violently exploded.

Note: a full explanation of Tom Bearden's involvement in the Chernobyl disaster is recounted in his latest book "**Fer de Lance**"



Scalar Potential Interferometer

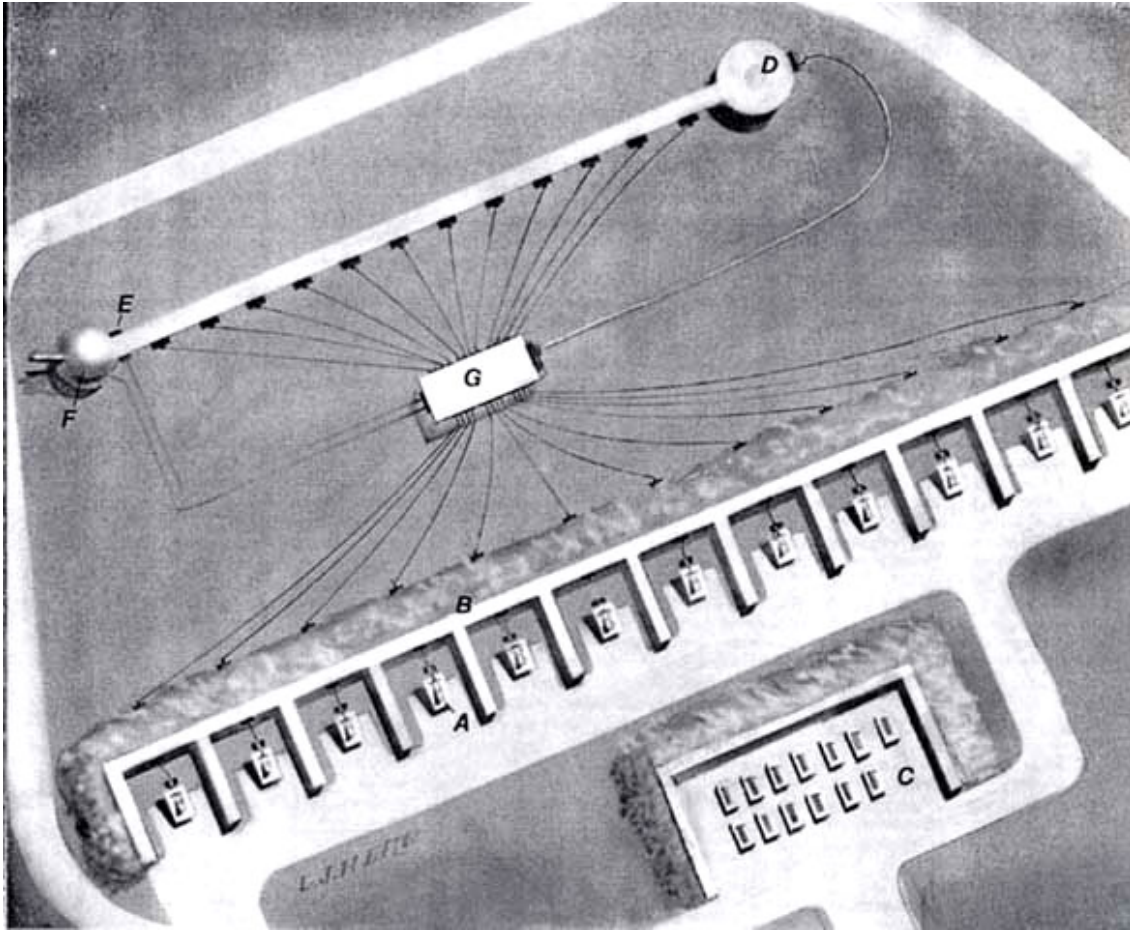
Figure 6. Multimode Tesla Weapon

In the 1930's Tesla announced other bizarre and terrible weapons: a death ray, a weapon to destroy hundreds or even thousands of aircraft at hundreds of miles range, and his ultimate weapon to end all war – the Tesla shield, which nothing could penetrate. However, by this time no one any longer paid any real attention to the forgotten great genius. Tesla died in 1943 without ever revealing the secret of these great weapons and inventions.

Unfortunately, today in 1981 the Soviet Union has long since discovered and weaponized the Tesla scalar wave effects. Here we only have time to detail the most powerful of these frightening Tesla weapons – which Brezhnev undoubtedly was referring to in

1975 when the Soviet side at the SALT talks suddenly suggested limiting the development of new weapons "more frightening than the mind of man had imagined."

One of these weapons is the Tesla howitzer recently completed at the Saryshagan missile range and presently considered to be either a high-energy laser or a particle beam weapon, (See Aviation Week & Space Technology, July 28, 1980, p. 48 for an artist's conception.)



Aviation Week & Space Technology July 28, 1980

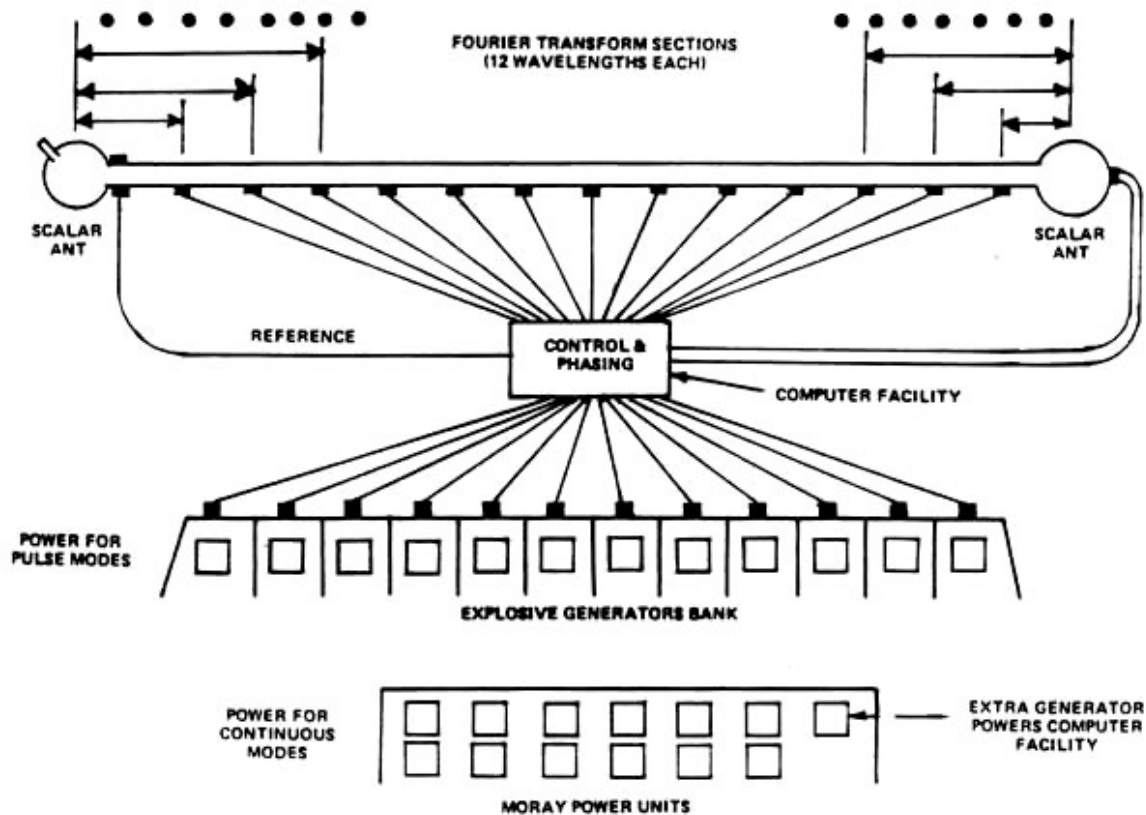


Figure 7. Tesla Weapons at Saryshagan

The Saryshagan howitzer actually is a huge Tesla scalar interferometer with four modes of operation. One continuous mode is the Tesla shield, which places a thin, impenetrable hemispherical shell of energy over a large defended area. The 3-dimensional shell is created by interfering two Fourier-expansion, 3-dimensional scalar hemispherical patterns in space so they pair-couple into a dome-like shell of intense, ordinary electromagnetic energy.

The air molecules and atoms in the shell are totally ionized and thus highly excited, giving off intense, glowing light. Anything physical which hits the shell receives an enormous discharge of electrical energy and is instantly vaporized – it goes pfft! like a bug hitting one of the electrical bug killers now so much in vogue.

If several of these hemispherical shells are concentrically stacked, even the gamma radiation and EMP from a high altitude nuclear explosion above the stack cannot penetrate all the shells due to repetitive absorption and reradiation, and scattering in the layered plasmas.

In the continuous shield mode, the Tesla interferometer is fed by a bank of Moray free energy generators, so that enormous energy is available in the shield. A diagram of the Saryshagan-type Tesla howitzer is shown in figure 7. Hal Crawford's fine drawing of the interferometer end of the Tesla howitzer is shown in figure 6.

Hal's exceptional rendition of the Tesla shield produced by the howitzer is shown in figure 8.

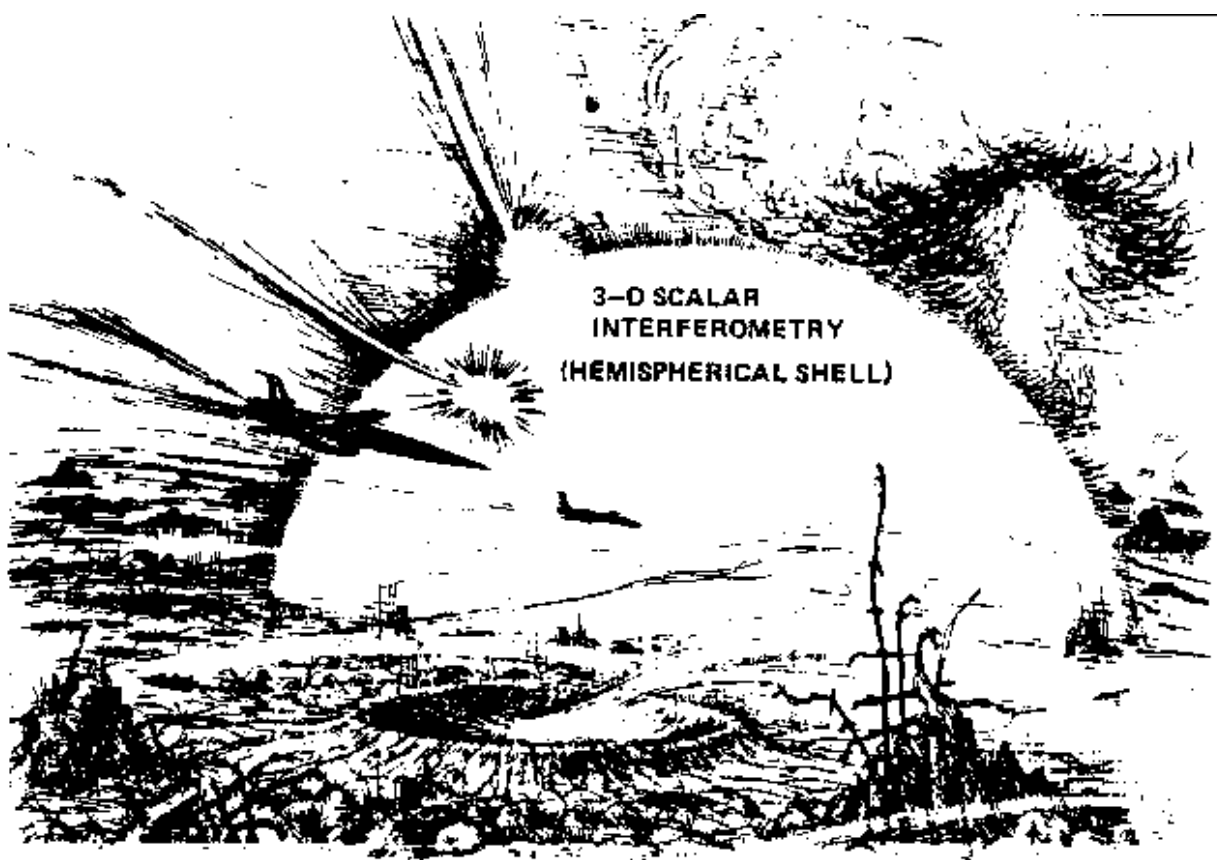


Figure 8. The Tesla Shield

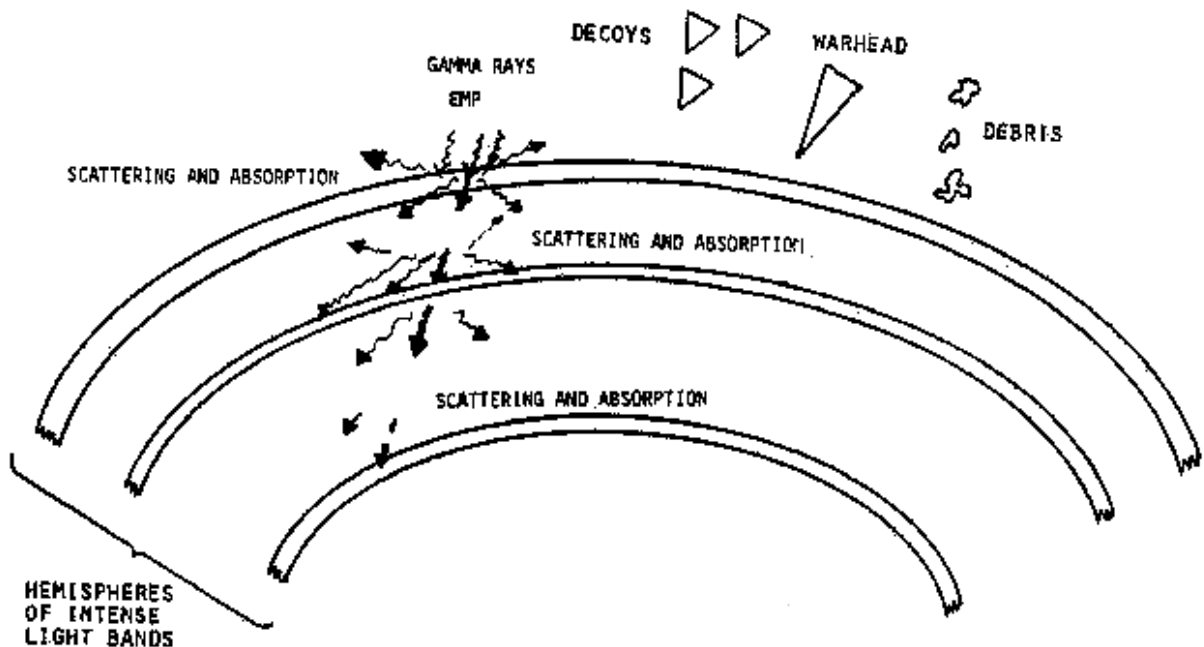


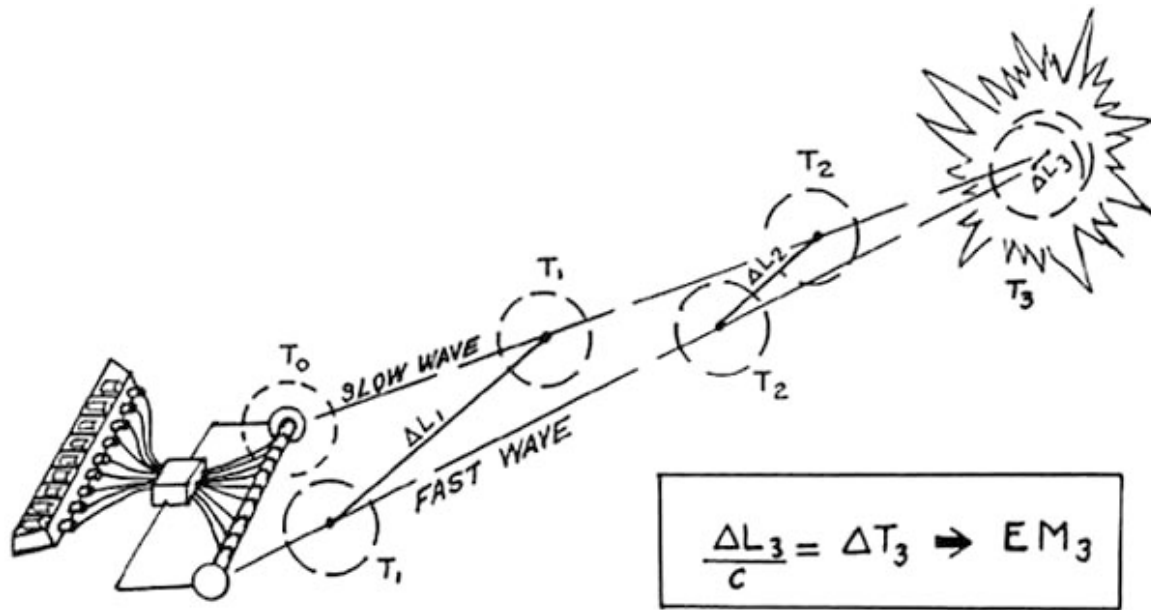
Figure 9. Tesla Terminal Area Defense System

In the pulse mode, a single intense 3-dimensional scalar phi-field pulse form is fired, using two truncated Fourier transforms, each involving several frequencies, to provide the proper 3-dimensional shape (Figure 10). This is why two scalar antennas separated by a baseline are required. After a time delay calculated for the particular target, a second and faster pulse form of the same shape is fired from the interferometer antennas.

The second pulse overtakes the first, catching it over the target zone and pair-coupling with it to instantly form a violent EMP of ordinary vector (Hertzian) electromagnetic energy. There is thus no vector transmission loss between the howitzer and the burst. Further, the coupling time is extremely short, and the energy will appear sharply in an "electromagnetic pulse (EMP)" strikingly similar to the 2-pulsed EMP of a nuclear weapon.

This type weapon is what actually caused the mysterious flashes off the southwest coast of Africa, picked up in 1979 and 1980 by Vela satellites. The second flash, e.g., was in the infrared only, with no visible spectrum. Nuclear flashes do not do that, and neither does superlightning, meteorite strikes, meteors, etc.

In addition, one of the scientists at the Arecibo Ionospheric Observatory observed a gravitational wave disturbance - signature of the truncated Fourier pattern and the time-squeezing effect of the Tesla potential wave - traveling toward the vicinity of the explosion.



**TESLA HOWITZER
(SCALAR INTERFEROMETER)**

Figure 10. "Nuclear" Flashes off the Coast of Africa



Lithuania - 10 Sep 1976 - British European Airways Flight #831 between Moscow and London

CIA Report Released under FOIA

Figure 11. Continuous Tesla Fireball

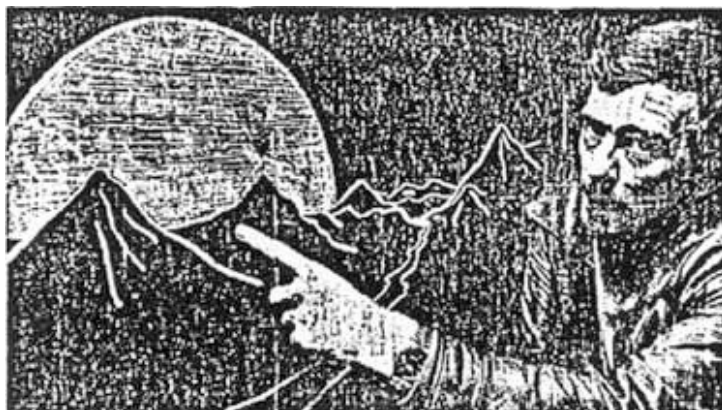
The pulse mode may be fed from either Moray generators or -- if the Moray generators have suffered their anomalous "all fail" malfunction -- ordinary explosive generators.

Thus the **Tesla howitzer** can always function in the pulse mode, but it will be limited in power if the Moray generators fail.

In the continuous mode, two continuous scalar waves are emitted -- one faster than the other -- and they pair-couple into vector energy at the region where they approach an in-phase condition. In this mode, the energy in the distant "ball" or geometric region would appear continuously and be sustained -- and this is Tesla's secret of wireless transmission of energy at a distance without any losses. It is also the secret of a "continuous fireball" weapon capable of destroying hundreds of aircraft or missiles at a distance.

An example of a Soviet test of this mode of operation is shown in figure 11.

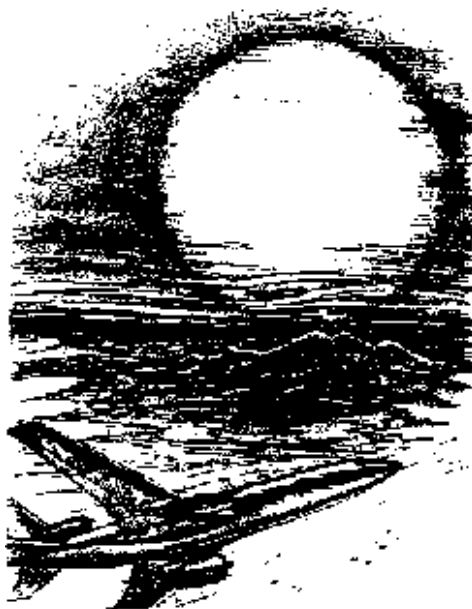
Witness to a super weapon?



Nick Downie describes the strange lurid glow that flared silently over the Hindu Kush

THE SUNDAY TIMES, 17 AUGUST 1980

(Multiple incidents in Sept., 1979)



TEHERAN, IRAN 17 JUNE 1966

SEEN FROM NEAR MEHRABAD AIRPORT

OBSERVED 4-5 MINUTES

SEEN BY 2 AIRCRAFT

CIA REPORT RELEASED UNDER FOIA

Figure 12. Tesla EMP Globe

The volume of the Tesla fireball can be vastly expanded to yield a globe which will not vaporize physical vehicles but will deliver an EMP to them to dud their electronics.

A test of this mode is shown in figure 12. (See also Gwynne Roberts, "Witness to a Super Weapon?", the London Sunday Times, 17 August 1980 for several other tests of this mode at Saryshagan, seen from Afghanistan by British TV cameraman and former War Correspondent Nick Downie.)

If the Moray generators fail anomalously, then a continuous mode limited in power and range could conceivably be sustained by powering the interferometer from more conventional power-sources such as advanced magnetohydrodynamic generators.

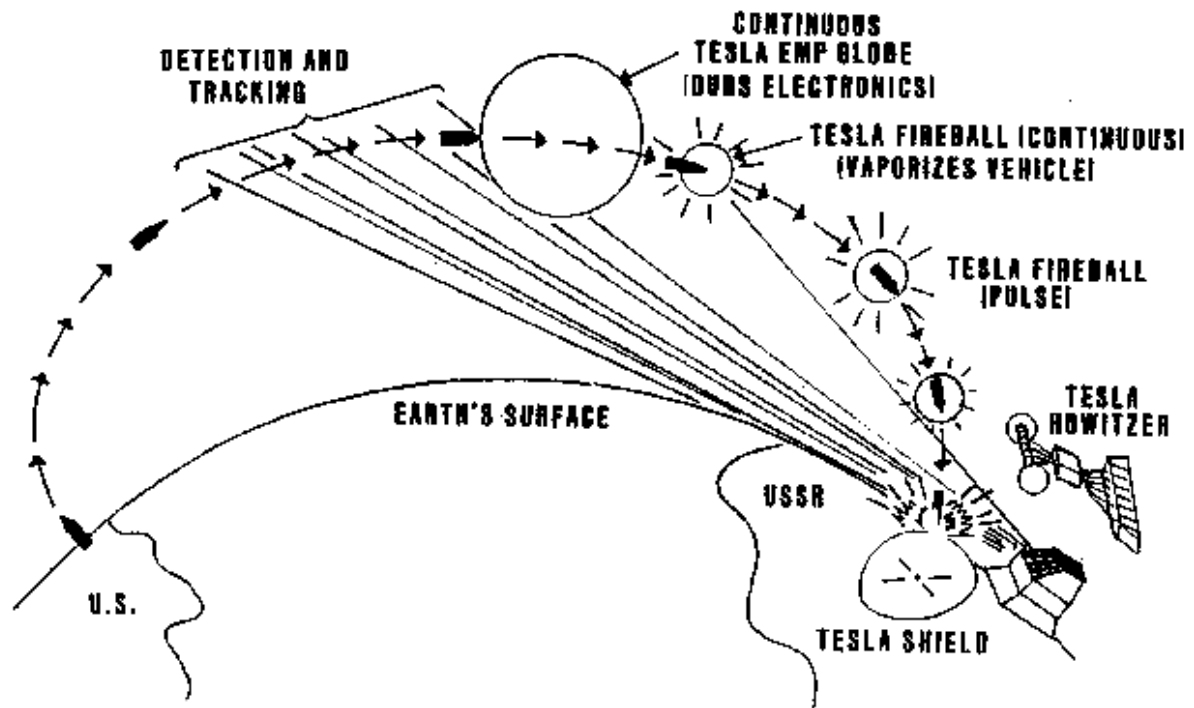


Figure 13. Tesla ABM Defenses

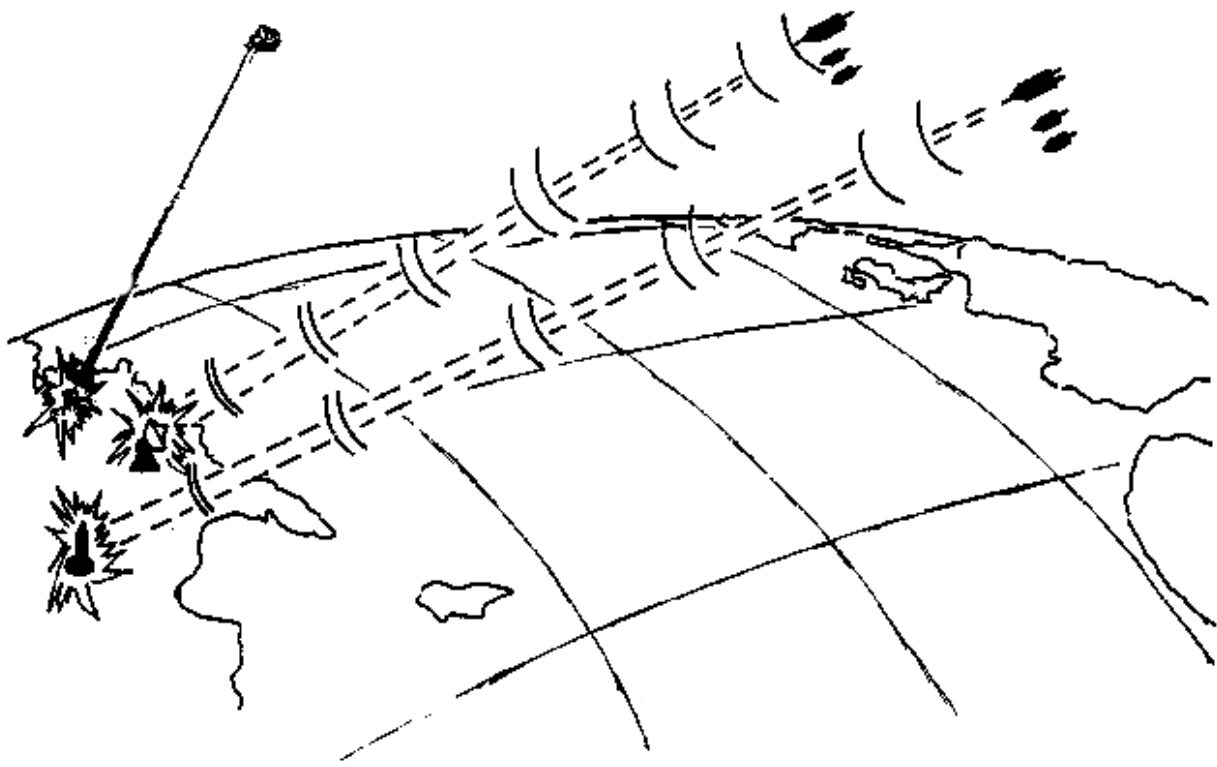


Figure 14. Moray/Tesla Technology: Star Wars Now

Typical strategic ABM uses of Tesla weapons are shown in figure 13. In addition, of course, smaller Tesla howitzer systems for anti-tactical ballistic missile defense of tactical troops and installations could be constituted of more conventional field missile systems using paired or triplet radars, of conventional external appearance, in a scalar interferometer mode.

With Moray generators as power sources and multiply deployed reentry vehicles with scalar antennas and transmitters, ICBM reentry systems now can become long range "blasters" of the target areas, from thousands of kilometers distance (figure 14). Literally, "Star Wars" is liberated by the Tesla technology. And in air attack, jammers and ECM aircraft now become "Tesla blasters." With the Tesla technology, emitters become primary fighting components of stunning power.

The potential peaceful implications of Tesla waves are also enormous. By utilizing the "time squeeze" effect, one can get antigravity, materialization and dematerialization, transmutation, and mindboggling medical benefits. One can also get subluminal and superluminal communication, see through the earth and through the ocean, etc. The new view of phi-field also provides a unified field theory, higher orders of reality, and a new super-relativity, but detailing these possibilities must wait for another book.

With two cerebral brain halves, the human being also has a Tesla scalar interferometer between his ears. And since the brain and nervous system processes avalanche discharges, it can produce (and detect) scalar Tesla waves to at least a limited degree. Thus a human can sometimes produce anomalous spatiotemporal effects at a distance and through time.

This provides an exact mechanism for psychokinesis, levitation, psychic healing, telepathy, precognition, postcognition, remote viewing, etc. It also provides a reason why an individual can detect a "stick" on a radionics or Hieronymus machine (which processes scalar waves), when ordinary detectors detect nothing.

Unfortunately there is not room to develop the implications of this human Tesla interferometry in detail, for that must wait for yet another book, presently in its initial stages, that Hal Crawford and I are writing.

Table 5. Orders of Reality

- **PHOTONS ARE**
 - > **PAIR-COUPLED SCALARS**
 - > **VELOCITY-LIMITED TO C**
 - > **CARRIERS OF T**
- **PHOTON INTERACTION**
 - > **IS UBIQUITOUS**
 - > **PRODUCES $\dot{T} = C$**
 - > **YIELDS 1st ORDER REALITY**
- **SCALAR O WAVES**
 - > **NOT VELOCITY-LIMITED**
 - > **YIELD HIGHER ORDER REALITIES**

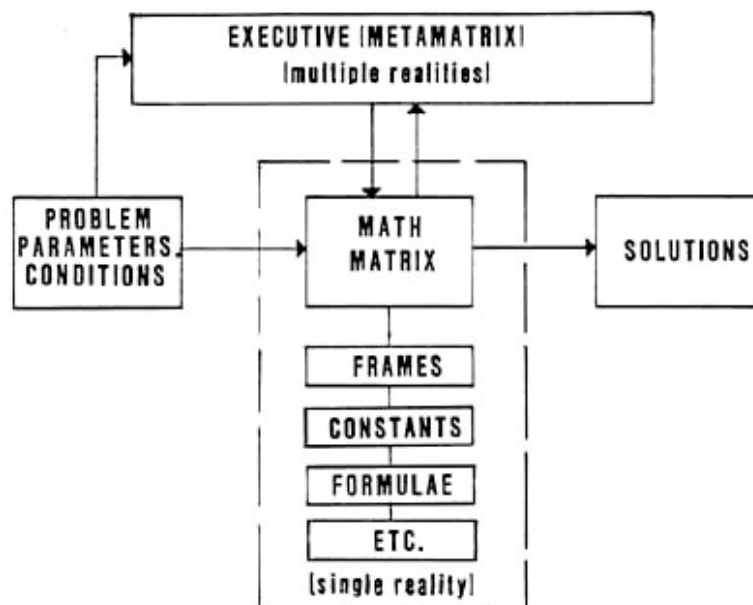


Figure 15. Implications of Tesla Potential

At the July 1981 U.S. Psychotronics Association's Annual Conference in Dayton, Ohio, I presented the first rough paper on the Tesla secret and scalar interferometry. A videotape of the presentation was made and will shortly be available. I am also scheduled to make a special presentation at the Alternate Energy Conference in Toronto, Canada in latter October, 1981.

A professional, videotaped two-hour presentation on this subject is also being prepared. Wide distribution of the material through the international underground physics and technology network has already been made. This time, God willing, Tesla's secret will not be suppressed for another 80 years!

And perhaps it is not yet too late. The material has cost me (now) some 16 years of agonizing labor and nearly \$100,000 of my own personal funds. No orthodox university, scientific group, foundation, or governmental agency would support such an effort, either financially or otherwise. Indeed, most ordinary journals will not even accept material on such matters.

Nonetheless, the area is of overwhelming importance and I truly believe Tesla's lost secret will shortly affect the lives of every

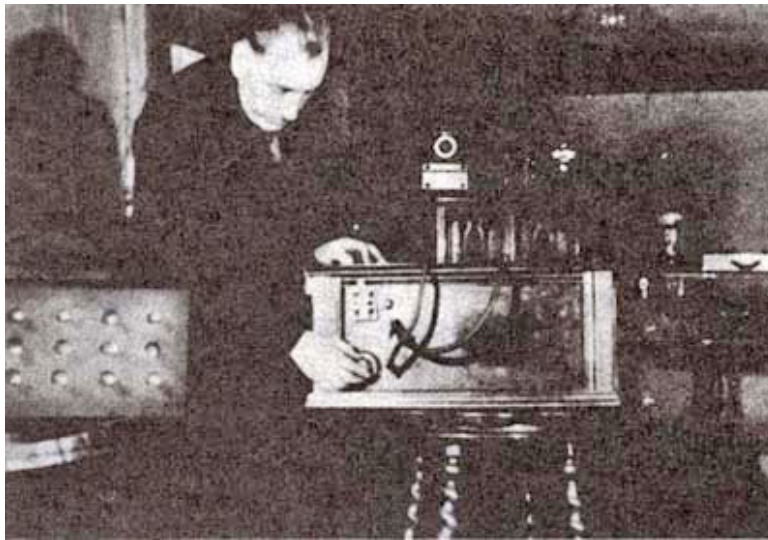
human being on earth.

Perhaps with the free and open release of Tesla's secret, the scientific and governmental bureaucracies will be shocked awake from their slumber, and we can develop defenses before Armageddon occurs. Perhaps there is hope after all -- for even Brezhnev, in his strange July, 1975 proposal to the SALT talks, seemed to reveal a perception that a turning point in war and weaponry may have been reached, and that human imagination is incapable of dealing with the ability to totally engineer reality itself.

Having tested the weapons, the Soviets must be aware that the ill-provoked oscillation of timeflow affects the minds and thoughts -- and the very lifestreams and even the collective species unconsciousnesses -- of all lifeforms on earth. They must know that these weapons are two-edged swords, and that the backlash from their use can be far more terrible to the user than was the original effect to his victim.

If we can avoid the Apocalypse, the fantastic secret of Nikola Tesla can be employed to cure and elevate man, not kill him. Tesla's discovery can eventually remove every conceivable external human limitation.

If we humans ourselves can elevate our consciousness to properly utilize the Tesla electromagnetics, then Nikola Tesla - who gave us the electrical twentieth century in the first place - may yet give us a fantastic new future more shining and glorious than all the great scientists and sages have imagined.



T. Henry Moray makes some final adjustments in tuning his radiant energy device to tap zero-point vacuum energy

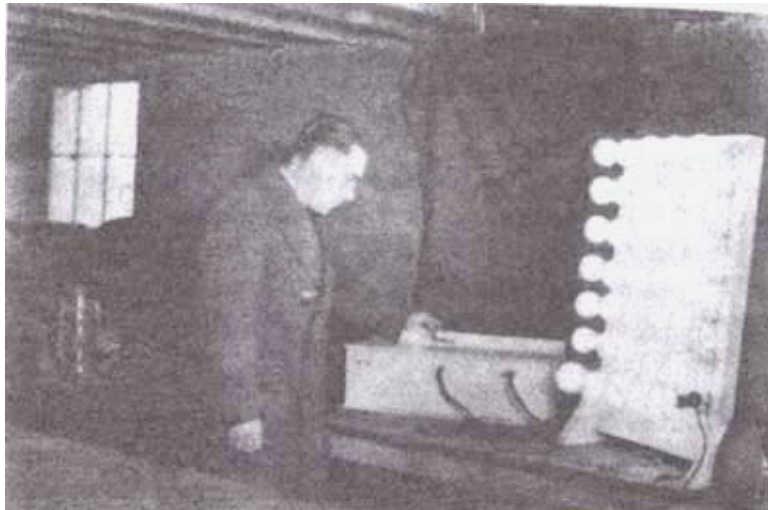
THE MORAY RADIANT ENERGY DEVICE

In the early 1900's, **Dr. T. Henry Moray** of Salt Lake City produced his first device to tap energy from the metafrequency oscillations of empty space itself. Eventually Moray was able to produce a free energy device weighing sixty pounds and producing 50,000 watts of electricity for several hours. Ironically, although he demonstrated his device repeatedly to scientists and engineers, Moray was unable to obtain funding to develop the device further into a useable power station that would furnish electrical power on a mass scale.

As a boy, Moray had been deeply inspired by the greatest electrical genius of all time, Nikola Tesla. His imagination was especially fired by Tesla's claims to have knowledge of an energy source greater than ordinary electricity, and by Tesla's emphasis on frequencies as the stuff of the universe. When Moray finished high school in Salt Lake City, he went abroad to study, and took resident examinations for his doctorate in electrical engineering from the University of Uppsala, Sweden, during the period 1912-14. Returning home, his diploma and credentials were interrupted by World War I, and the University mailed him these items in 1918 after the war.

Shortly thereafter, Moray produced his first elementary device that delivered measureable electrical power, and he continued to work diligently on energy devices when he had time. In the 1920's and 1930's he steadily improved his devices, particularly his detector tube, the only real secret of the device according to Moray himself. In his book, *The Sea of Energy in Which the Earth Floats*, Moray presents documented evidence that he invented the first transistor-type valve in 1925, far ahead of the officially recognized discovery of the transistor. In his free energy detector tube Moray apparently used, inside the tube itself, a variation of this transistor idea—a small rounded pellet of a mixture of triboluminescent zinc, a semiconductor material, and a radioactive

or fissile material His patent application (for which a patent has never been granted) was filed on July 13, 1931, long before the advent of the Bell Laboratories' transistor.



Here the Moray radiant energy device is providing free power to 35 100-watt lamps and a 1200-watt iron.

In test after test Moray demonstrated his radiant energy device to electrical engineering professors, congressmen, dignitaries, and a host of other visitors to his laboratory. Once he even took the device several miles out in the country, away from all power lines, to prove that he was not simply tuning in to energy being clandestinely radiated from some other part of his laboratory. Several times he allowed independent investigators to completely disassemble his device and reassemble it, then reactivate it themselves. In all tests, he was successful in demonstrating that the device could produce energy output without any appreciable energy input. According to exhaustive documentation, no one was ever able to prove that the device was fraudulent or that Moray had not accomplished exactly what he claimed. On the other hand, the records are full of signed statements from physicists, electrical engineers, and scientists who came to the Moray laboratory as doubting Thomases and left with the complete conviction that Moray had indeed succeeded in tapping a universal source of energy that could produce free electrical power.

But in the face of all of this, the U.S. Patent Office refused to grant Moray a patent, first, because his device used a cold cathode in the tubes (the patent examiner asserted it was common knowledge that a heated cathode was necessary to obtain electrons) and, second, because he failed to identify the source of the energy. All sorts of irrelevant patents and devices were also presented as being infringed upon or duplicated by Moray's work. Each of these objections was patiently answered and nullified by Moray; nonetheless, the patent has still not been issued to this day, although the Morays still keep the patent application current.

One of Moray's efforts to develop the machine involved an association with the Rural Electrification Agency for a short time before World War II. At that time, the R.E.A. was apparently infiltrated by Communist sympathizers and high level officials of a decidedly pinkish tinge. These officials continually urged Moray to turn over all details of his device to the Soviet Union, and even arranged the visit of high-level Soviet scientists to the Moray laboratory to see the device in operation. On the initiative of the Communist-infiltrated R.E.A., one person—let us call him "Z"—spent about two months in Moray's laboratory, and succeeded in worming his way into Moray's full confidence. Moray eventually disclosed most of the details of the construction of his special valve to "Z"—the only person in whom Moray ever completely confided.

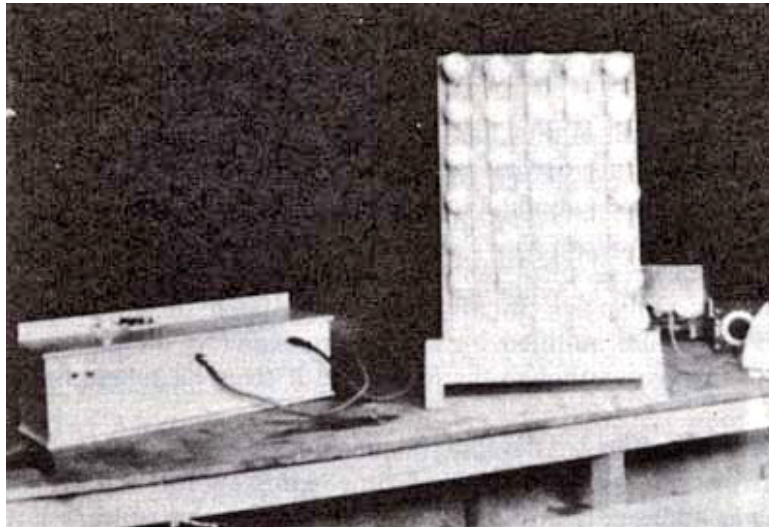
There is strong reason to believe that "Z" was a Soviet agent, and that this is where the Soviets first obtained the impetus to develop the hyperspace amplifiers later used in their psychotronic weapons.

However, Moray became quite alarmed at the continued attempts of his R.E.A. contacts to get the device into the hands of the Russians. He eventually concluded that he had become involved with a governmental group filled with radicals and reactionaries. Moray became concerned that fifth column activity was actually directed against him in an attempt to steal his device. Quotes from the *Salt Lake Tribune* of December 2, 1941, attributed to Representative Thomas D. Winter, imply that Moray's suspicions of the R.E.A. were well founded, since Representative Winter called for a full-scale investigation of the R.E.A. on the grounds of Communist infiltration. Indeed, Moray was wounded by gunshot in his own laboratory on March 2, 1940, which seems to suggest that his fears and suspicions were based on fact. Moray severed his association with the R.E.A. in February 1941.

However, his basic unit had been destroyed by a hammer-slinging witness in 1939; it is not clear whether or not this was the work of "Z" or of someone else. According to his son, John Moray, the man who broke his unit, as well as other interested groups, wanted complete disclosure of the materials and construction — nothing more or less. John Moray, who operates the Research Institute in Salt Lake City, has been trying to continue his father's work since the basic unit was destroyed. Dr. Moray himself died in May 1974.

According to John Moray, highly energetic cosmic rays from space are tapped by the machine, which is in subharmonic resonance with this high-frequency energy level, and it converts this energy level into a usable form of electricity. However, John

Moray's use of the term "cosmic ray" is not necessarily the same as that of modern physics, but in fact is the same as the present concept of "zero-point" energy of vacuum. T. Henry Moray envisioned all space filled with tremendously high frequency vibrations carrying vast and incalculable amounts of pure raw energy. He envisioned the dynamic Universe as a turbulent source of great energy, just as the ocean waves carry energy throughout the earth. This was also the vision of Tesla, and after him of Clifford and Einstein, who turned the attention of general relativity to the problem of the nature of the vacuum itself. Clifford and Einstein founded a branch of physics that has come to be known as quantum geometrodynamics, the study of energetic change that occurs in little pieces, including the concept that very small lengths of space, or pure vacuum, themselves oscillate at great frequency and with great energy. In Moray's day relativity was still a strange and unproven branch of physics, suspected and rejected by most of the physicists of the day, and quantum physics was still in the process of being worked out. There was no theory whatsoever predicting that empty space itself not only contained prodigious quantities of energy, but in fact was prodigious quantities of energy. But slowly, over the decades, the picture has changed, and the modern followers of quantum geometrodynamics assert the truth of Tesla's original vision. Today we know that one cubic centimeter of pure vacuum contains enough energy to condense into $10^{80} - 10^{120}$ grams of matter! Thus the major part of Moray's thesis—that vacuum itself contains unlimited energy—is vindicated today. In this sense empty space is like a gigantic, restless ocean, and Moray's free energy "tapping" device is no more mysterious than the water wheel. In other words, his thesis that the energy is there to be tapped is correct; it only awaits a practical method to tap it in order to solve the energy problems of mankind forever.



Once tuned in, the power continues and is free for the taking.

Moray thus is vindicated as a man ahead of his time, who simply built a device before any theory existed to explain its operation. Moray met with constant opposition, and his life and that of his family was anything but pleasant. Certain pressure groups constantly tried to force him into selling for almost nothing, or to disclose the secrets of his valve's construction. He was often attacked and he was sometimes shot at on the city streets. In fact, his life was threatened so often that he was forced to install bulletproof glass in his automobile. His laboratory was broken into, some of his components and papers were stolen, and his dogs were continually being killed. Moray was shot in his own laboratory, and he himself always carried a gun. Because he was harassed ceaselessly, over the years he became understandably suspicious and close-mouthed about his work. He sometimes greeted visitors at his desk with a loaded pistol lying on the desk within easy reach, and occasionally confirmed that he would not hesitate to shoot if he were attacked or threatened. One of his greatest fears was that big interests would take up his invention and simply shelve it to keep it from benefiting the public. When large companies made him offers, he always demanded written guarantees that the device would be put into production and sold to everyone, once it was developed.

Moray also realized the potential of his device as a weapon. He was fully aware that the only difference between a controlled energy device and an explosion is the rate of release of the energy. According to John Moray, his father received an offer to go to Japan in 1938 because he had built a deathray which operated off the device. According to John, a representative of the Japanese government came to the laboratory and offered a position to Moray, but he refused. Allegedly Moray had managed to rig the device so that it projected a ray of energy in a beam, and could kill mice instantly at over fifty feet. When radiated by the beam, the mice were carbonized immediately. They appeared frozen, but nothing was left except their shells, and they simply fell apart when touched.

In one experiment Moray ran his device for 157 hours without any connection to external power sources, and produced over fifty kilowatts of power during the test. He also found that an additional fifty kilowatts could be added by simply providing another tap further back in the circuit. When he shut the device off from this test, he had proven once and for all that the device was generating electrical energy from free and natural sources without batteries or external power. During this test nothing in the machine heated up; instead, all parts of the circuit ran absolutely cold. This alone is totally unexplainable by ordinary electromagnetic theory, and it strongly implies the truth of Moray's assertion that the device simply collects the energy in each of its stages in a subharmonically resonant manner, in synchronization with the extremely high frequency cosmic oscillations. In other words, since the parts of the machine ran cold, it is clear that the energy was being simultaneously collected at each stage rather than being processed through the individual stages in serial order, since serial processing in the conventional electrical

sense would lead to resistance heating of the circuit elements.

Moray's device used twenty-nine stages of his special detector valves, which were difficult to produce, costing about five hundred dollars each. Only about one in four proved suitable for operation. He also had difficulty in obtaining sufficiently pure materials to make his special mixture for the pellet that enabled tube operation in a one-way gating fashion. Moray explained that his device was based on the discovery of a mixture that would act as a one-way gate for the high frequency oscillations of space, so that the energy could go through the material more readily in one direction than another. Thus it was like a one-way gate valve to an ocean wave; the energy "water" could flow in in each valve, but was prevented from flowing back out. The assemblage of multiple stages thus provided a series of collectors which contained enough energy to be useful. Theoretically there was no limit to the number of collectors that could be added, and so there appeared to be no limit to the energy that such a device could produce.

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