



The Journal of Borderland Research

VOLUME XLIII, No. 3

May-June 1987

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THE JOURNAL OF BORDERLAND RESEARCH is a publication of Borderland Sciences Research Foundation, Inc., P.O. Box 429, Garberville, California 95440-0429 USA. Phone: (707) 986-7211 The Journal is edited and assembled by Thomas Joseph Brown, Director of BSRF, and is published six issues a year (bi-monthly) with the assistance of the BSRF Associates. The Journal is issued to members of BSRF.

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The Main Function of BSRF is to act as a clearinghouse for information. BSRF is chartered to accept donations to further Research into the Borderlands of Science. Active research is being carried out and results are published in The Journal. The majority of available funds for BSRF expenses come from sales of Research Publications and Equipment.

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The presence of flying saucer spacecraft was the catalyst that caused Wilhelm Reich MD. to apply the invention of the cloudbuster to the task of combatting desert development in the Arizona expedition of 1954 - 1955.

From the historic Oranur Experiment of 1951, Reich knew that nuclear radioactivity had a deleterious effect upon the living sea of energy in which we all live. From the observations made of the reaction of a milligram of radium put inside an Orgone Energy Accumulator, Reich knew that there was an antagonistic relationship between the energy of life (Ether, Prana, Zero point energy, The "Force" etc.) and the manmade nuclear energy so recently unleashed upon the planet. The effect of the nuclear "irritant" seemed all out of proportion to the physical amount of radioactive material. The distance of this irritating and wildly exciting Orgone anti Nuclear effect seemed to reach much farther than the actual radioactivity of the nuclear material would indicate. Perhaps, Reich reasoned, the Orgone Energy was a continuum; and this anti nuclear reaction of the life energy (Oranur) extended and perpetuated itself in a chain reaction fashion far beyond the original limits of the nuclear radiation. This would account for the New York Times story of an AEC announcement of an increase in background radiation extending for 600 miles with Rangeley Maine as the center of the radius.

We tend to remember pioneers who blaze new trails for others to follow. We remember the Wright brothers who invented the airplane; we remember Christopher Columbus who discovered the New World; we remember Nikola Tesla who invented the Tesla coil. Though others may duplicate and replicate and even improve these historic discoveries and inventions, it is the original pioneer who has the most impact: the world was flat before Columbus proved otherwise; electricity was virtually impractical for commercial use before Tesla gave us alternating current; heavier than air flying was officially "impossible" before the brothers from Dayton built and flew that first airplane.

So it was with Reich and his cloudbuster. He was the pioneer who did it first and necessity was the motive. The cloudbuster was a response to the aftermath of the Oranur Experiment. Concurrent to the energetic pollution of the local environment around Reich's lab near Rangeley Maine; at this same time in 1952 and 1953, flying saucer objects were being spotted with alarming regularity in the vicinity of Oregon.

Even today, the very mention of "flying saucer" is enough to invite polite smiles or perhaps ridicule or more extreme reactions such as being called mentally incompetent or just plain crazy to think such things. The magnitude of the phenomena certainly rivals and really surpasses the discovery of the New World 500 years ago. And what a controversy that was! Many a good person was condemned for heresy to even think that the cosmology taught by the Christian Church was not in accord with Nature's real design. The incapacitating religion that Christianity had become left no room for the restless spirit living still in the soul of the West. But the land of our ancestors, from the Urals to the Atlantic, produced a race instilled with so indomitable a spirit that even centuries of an alien, Eastern religion could not entirely dampen the inner spark that led to the first voyages across the mighty ocean in wooden ships. This land America is the New World - the fruit of the discoveries made by the European pioneers starting 500 years ago.

Today the flying saucers bring a new challenge to our people. Just as the "authorities" deny the existence of the unprecedented 40 years of UFO observations made by a full 10 % of the population - so did the authorities deny the existence of the new world when the old one was officially flat.

We have a system toadie like Carl Sagan or James Oberg who can with the greatest scientific authority "prove" that there are no observations being made of a new scientific phenomena, the unidentified flying objects in the skies of Earth. Even worthy organizations like MUFON get bogged down by their reactionary attempts to be "scientific" in describing and quantifying and precisely measuring these startling incidents involving apparent aliens. Thus the exact time and duration of a sighting, the exact number of degrees of elevation of the object's position, the smallest detail becomes more important than the big picture - the fact of the presence of unknown spacecraft reconnoitering Earth ! For fear of ridicule and desiring acceptance within the scientific community, serious scholars (especially those with university funding) seem compelled to present a pro and con on the very premise of the existence of the subject matter being studied. This reaction is not new in the sociology of people: the magnitude of the new event can be measured by the resistance of the authorities toward it.

Wilhelm Reich didn't try to prove anything by studying flying saucers. The work with the cloudbuster in dealing with the unusual DOR conditions seemed to attract the attention of hovering craft parked high in the sky overhead. The initial success of the cloudbuster in removing the radioactive DOR clouds from the vicinity of Reich's 320 acre farm in Maine soon led to weather modification work in general. This device seemed to influence the flow of the atmospheric life energy so efficiently that soon techniques were developed by Reich and his staff to actually modify and change predicted weather patterns. Reich did not try to impress people with his rainmaking prowess, instead he began to notice that the presence of a UFO seemed to nullify the DOR removal effects of the cloudbuster. It went like this: Reich would use the cloudbuster to remove energetic pollution from the atmosphere; it was not clear if the DOR (Deadly Orgone Energy) was a by product from the initial run of the Oranur Experiment or whether the massive atmospheric nuclear explosions being set off by the Air Force and the Russians were creating DOR conditions on a planetary scale.

In any case, the DOR clouds would come in with the weather flow from the West and tend to hover over Reich's farm. The cloudbuster was used to rid the area of this new form of atmospheric energetic pollution. The presence of a flying saucer in the area seemed to re-pollute the atmosphere with a functionally similar type of pollution, i.e. DOR !

By 1954 Wilhelm Reich was ready to test the cloudbuster in a more challenging environment for weather modification than Maine. More than thirty years has passed since the desert expedition and still no one has matched the import and magnitude of the harvest of new knowledge gained during those few months. Basically Reich discovered that the desert process is a reversible one and that desert formation is a function of the life energy metabolism in an area. Additionally, enough observations were made to formulate a hypothesis concerning certain behavioral aspects of the UFO's encountered during this period. The hostility hypothesis tentatively suggested by Reich states that UFO's use the mass free life energy as fuel and spew a DOR like exhaust as a spent by product.

Reich further suggests that there may be a parasitic or feeding function of the UFO's upon the generous endowment of life energy indigenous to this living planet. As a medical doctor, Reich was well acquainted with the often symbiotic relationships found in most organisms in Nature. Reich's hostility hypothesis is based strictly on his observations made as a scientist studying a new phenomena. This hypothesis does not take into account the many other observations made during the same time period by other observers. For example: George Adamski allegedly made repeated observations of UFO's and their occupants and recorded an entirely different description, a "space brother" if you will.

Reich develops his line of postulation by analyzing the relationship between desert development on Earth, the advent of nuclear technology, and the sudden, massive and continuing rash of sightings of flying discs.

Let's briefly examine this desert expedition made by Reich and his brightest lieutenants under stressful conditions (the FDA had launched their eventually successful attack to prosecute Reich for his work with the Orgone Accumulator - a non FDA approved device used "illegally" for medical purposes). The desert expedition to Arizona was to be the last big round of discovery before the fatal legal battle with the FDA.

STAFF OF OROP DESERT Ea, 1952-1956



ELSWORTH F. BAKER, M.D.
"Organic Medicine," Financial Committee
1954-55



ROBERT A. McCULLOUGH
Research Associate—Organic Chemistry
Expedition Operator, 1953-55



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OROP Desert Ea Physician
Expedition Operator, 1952-56



THOMAS ROSS
Operator-Caretaker, Orgonon
1952-56



WILLIAM MOISE
Expedition Operator, Treasurer
1952-56



ERNEST PETER REICH
Student Operator
1954-55



MICHAEL SILVERT, M.D.
Operator New York, Transfer of ORUR
Treasurer, 1954-56



WILLIAM STEIG
DOR Emergency
Financial Committee, 1954-56

The great changes of history have been brought about by individual action. The mass of the people were never identified with them. Great reforms resulted from the efforts of a few individuals who knew exactly what they wanted and insisted upon getting it.

- anonymous

May 12, 1954: Wilhelm Reich points his cloudbuster at two "stars" in the evening sky. The two luminous objects fade out several times while cosmic Orgone Energy is being withdrawn from them by means of the cloudbuster. The emotional shock was great as Reich and three others watched these self luminous objects fade and dim out under the drawing effect of the cloudbuster. There was fear to repeat this maneuver lest the objects hovering high in the sky above Orgonon should take retaliatory action against the cloudbuster and its crew. There was the desert expedition coming up: preparations were in progress to see if the weather modification effects of the cloudbuster would be effective in the fully formed desert in Arizona. It was not until October 10, 1954 that this action of pointing a cloudbuster at a suspicious "star" was repeated.

These first observations of UFO's were made without trying to "prove" that they were real. Reich encouraged his assistants to dispense with exact quantitative measurements and instead to relax and let the observations force themselves upon the observer. If the new phenomena was valid, then it was also repeatable; there would be plenty of time for exact quantitative measurement later. There was obviously no use in trying to prove these unsettling sightings to the "authorities". In order to prove to the authorities and please the skeptics, the investigator may be blind to the obvious in a UFO sighting and miss gaining new knowledge altogether.

A simple chart Reich made to differentiate between stars and UFO's hovering high in the sky:

"STAR

1)Color: Steel blue; flimmering on clear days; not flimmering before onset of rain.

2)Size: Smaller than Jupiter.

3)Location: In known spot, nightly visible according to known astronomical schedule.

4)Movement: Lawful, predictable.

5) Known flying objects: Airplanes move at known speeds; straight or curved; balloons drift with the wind steadily, never against the wind.

UFO

Color: Yellow to red or white, flashing, pulsating. Changing color from yellow to red or green or vice versa.

Size: Mostly larger than Jupiter.

Location: Irregular upon systematic nightly observation. Sometimes appearing suddenly in middle of sky, vanishing suddenly.

Movement: At times regular in accordance with either fixed stars or planets on ecliptic. But also deviating grossly in speed and direction.

Unknown flying objects: May appear like a star on Eastern horizon, then move slowly along horizon to south and sink below horizon in west. UFO of the silvery type change speed abruptly, go against the wind, wobble like spinning tops, disappear suddenly, affect electro-magnetic instruments, cause clouds to disperse. "

"There is no proof. There are no authorities whatever. No President, Academy, Court of Law, Congress or Senate on this earth has the knowledge or power to decide what will be the knowledge of tomorrow. There is no use in trying to prove something that is unknown to somebody who is ignorant of the unknown, or fearful of its threatening power. Only the good, old rules of learning will eventually bring about understanding of what has invaded our earthly existence. Let those who are ignorant of the ways of learning stand aside, while those who know what learning is, blaze the trail into the unknown."

Wilhelm Reich - April, 1956.

C O R E

(Cosmic Orgone Engineering)

LAWRENCE
OROP DESERTby
WILHELM REICH, M. D.Part I
SPACE SHIPS, DROH and DROUGHT

CONTACT WITH SPACE

ORANUR
SECOND REPORT, 1951-1956OROP DESERT Ea
1954-1955by
WILHELM REICHORGONE INSTITUTE • ORGONON
Bangor, Maine, U.S.A.CORE PILOT PRESS
New York, N. Y.
1957

Fig. 4. Spacegun and Operators:

E. Peter Reich
M. Silvert, E. Reich, W. Moise

OROP DESERT Ea, Washington, D. C., 1955-56

Reich published his experimental results in such a way that others could freely duplicate his setup and methodology; for this reason, the majority of Reich's discoveries are extant today and available to scholars despite the Government's attempt to destroy his work and literally burn his books. Contrast this open attitude to those who hide behind "proprietary" considerations with the result of the discoveries being permanently lost upon the death of the inventor.

RULES TO FOLLOW IN CLOUD ENGINEERING

1. Shed all ambition to impress anyone.
2. Never play around with rain making or cloudhusting. The on envelope which you tackle while "drawing" energy from the atmosphere is an energetic continuum of high power. You may cause twisters. You may stir a forest fire into a wrong direction. You may do other damage without intending to do so. Never do anything unless you *must*.
3. If experimenting: it is more important to observe and know why you are doing what, than to achieve immediate results. Slowly growing comprehension will secure later results safely.
4. In cloud engineering you do *not* "create rain,"—you do *not* "destroy clouds,"—briefly, you are not playing God. What you do is solely helping nature on its natural course.
5. Have your equipment, truck, etc. especially all metal parts well grounded into water, preferably flowing water. Lack of grounding imperils your organism.
6. Do not let workers draw on energy *any* longer if they become blue or purple in their faces or feel dizzy. Exchange the workers; let them rest far enough away, and have their faces and arms always wetted down with fresh water.
7. Do not hold on to pipes or other metal parts while you draw on. Always use a separate plastic or wooden handle to move equipment while drawing. Have your hands always well insulated with rubber or heavy cotton gloves.
8. Have signs put up in such a manner that no one is hurt by on charges. Do not let people stand close by. Among them may be men or women who are ill and would run some danger to their health.
9. Never "drill a hole" into the sky right above you unless you aim for a long drawn rain.
10. When you feel a breeze or wind setting in due to your operation, stop drawing if the wind becomes too strong or even if it acquires the appearance of a twister.
11. If you wish to remove non clouds, *draw in direction of run of on envelope*.
12. If you wish to DESTROY clouds or to stop rain, *aim at center of heaviest clouds*.
13. If you wish to make clouds grow heavier, draw from the vicinity of the smaller clouds, and leave the large or heavy clouds undisturbed.
14. If there are no clouds in the sky and clouds should be created, disturb the stillness or evenness of the on envelop all around you by brief, sweeping draws and *draw mainly against the run of the on envelope*. To create clouds you must create differences of on energy potentials.

In 1954, Reich discovered the original Oranur experiment Radium increased the power of the cloudbuster. The "denatured" Radium near the base of the metal draw tubes changed the action from "drawing" to directly increasing the life energy potential in the atmosphere. This Oranur experiment Radium that had been denatured by long exposure to concentrated Orgone Energy was named "ORUR". "Ea" equals UFO.

Conclusions Regarding Influencing Ea with ORUR - Spacegun

(1) The energy equilibrium of Ea can be disturbed or even put out of order by withdrawing energy from it directly. Its behavior is directly related to the successful operations.

(2) Signs of Ea having been affected: At first *stronger flicking* as if due to reactive struggle; *fading*, repeatedly interspersed with stronger lumination; getting smaller possibly with *field shrinking*; appearing to *recede* into greater distance; *fading out completely* with or without reappearance of lumination (see photos, pp. 20, 21); summary simultaneous disappearance of many Ea as if on common command; *flares* of warning (?) dropped from sky as if in alarm; *erratic movements* out of order.

(3) The power of the Oranur Spacegun is tremendous due to the sensitivity of the OR energy ocean. Early regulation and coordination of its use is paramount to planetary safety from abuse by Higs.

Due to the long, drawn out orurization on October 10, 1954, it rained gently on the morning of the following day.

That same day, too, I reached an understanding of how Orur worked; why the counts soared so high when an otherwise inactive ORUR was put into heavy lead shielding. In the open, without metal shielding, ORUR was peaceful, inactive, corresponding to the foggy type of existence. When put into the lead container, the field was apparently restricted and ORUR changed from the foglike to the *pointed* existence as seen on the lighted green screen and on photographs. This activity was responsible for the high EM action up to 100,000 CPM. It was the *restriction* of its peaceful activity which caused its "warlike" behavior. Why had I not seen this simple logic in the behavior of the Life Energy sooner? A peacefully living wild animal, if forcefully restricted, would suddenly act exactly the same way, or rather the OR energy within the animal acts the same way as ORUR within lead.

All biological motion, inner as well as locomotion, appeared now to be the reaction of OR to restriction of its free motility; it changed from the *foglike* to the *pointed* existence. The luminating points (see "Oranur Experiment, First Report," p. 195 and Fig. 8, p. 42 above) are *mechanical discharges* and thus constitute the source of a *motor force*. The action of the OR *motor* belongs here: An even sequence of impulses, registered on the GM counter, at a rate of at least 3,000 per minute, sets a motor into motion (see "Orgone Energy Bulletin," 1948). Also, a leg gone "asleep," wakes up again with sensations of ants crawling or fine needles pushing toward the skin surface. Good theory formation began to pay off. The assumption was fruitful in that it permitted further development to take place in the Arizona desert. It deserves further special, careful study.

The northwestern yellow Ea, the same which had faded out upon direct orurization, did not reappear in the sky after the "battle" of October 10th. There was only a red Ea ball hanging low, 5-10 degrees up, in the western sky on the northern shoulder of Bald Mountain. However, the DOR emergency continued to be critical at Orgonon. My

dog, Troll, had eaten little for three days. On the 13th, he was only lying around, sick and miserable. I, too, could not eat because of nausea. My daughter felt dizzy, as if "drawn from the head." She ate little. Grethe Hoff reported by phone from Boston that her little son had been sick for two days and that he was not eating. Our bath water was black-greenish after use that day, a certain sign of much DOR having been soaked from our bodies.

The Ea seemed very active lately. The strongest draw effects were felt from the southern one. I could not rid myself of the idea that, if there were any spacemen around or if these yellow and red luminating balls represented some kind of machines directed energetically from afar, whoever directed them must have been madly minded. That same day my GM counter failed completely by fading and jamming when the Orur joined the lead container. I did not understand why, except that the activity must have been very high, too high for the device to take.

Only a few days were left for us at Orgonon. Moise and my son Peter left Orgonon for Tucson, Arizona, two days after the "battle," on October 12, 8:15 a.m. My own departure was scheduled for October 19th.

Summary of Available Data, October, 1954

This was the state of knowledge available to the expedition:

(1) *Increasing the energy potential in the atmosphere* by way of ORUR was now available in addition to the old technique of *lowering* the potential at will by way of drawing off energy with the Cloudbuster.

(2) "Decrease" and "Increase" of potential could be interpreted in terms of functional physics simply as a change in the form of the atmospheric energy from the *foglike* (unexcited, low) to the *pointed* (excited, high) state of existence and vice versa. Only the "pointed" state of OR registers on the GM counter.

(3) There was little doubt left: One could now reach far into space with ORUR: the range was limitless theoretically, since the OR energy ocean is endless and most sensitive to stimuli as demonstrated by the processes of dawn, dusk, and our actual operations over vast stretches of space.

(4) The change from the "cloudy" to the "pointed" state of existence, or *activation* of OR was now possible by simply *impeding its freedom* of "lazy" motion or by direct irritation such as friction, sparking secondary coil systems, nuclear material, heat, etc.

(5) At that date, due perhaps to the increased DOR Emergency, we felt that there could be no doubt left as to the purposefulness of the activities of Ea: Energy was being withdrawn from our planet, with the consequences known now, 1956, far and wide as "DOR-Emergency"; decay of vegetation, the crumbling of granite rock, a feverish atmosphere. OR energy laws, mostly unknown to us earthmen, were used technically in the Ea operations. We earthmen had only just begun to make contact with these technological matters. We had, in addition to all this, to fight against the malignant activities at our backs of frustrated, dORIZED, neurotic individuals of our own kind. These were unmistakably represented at that time by the irresponsible activities, the conspiracy of corrupt, ignorant officials, the Higs in the FDA. "Orgone Energy does not exist," they said to the Judge, while the planet was being attacked with the use of this very same Cosmic Energy. It is little consolation that no one will remember these Higs only a few years hence.

(6) All of us who partook in this emergency felt "The war of the Universe was on," with Orgonon against its intention or design playing the role of a "Planetary Valley Forge," as it were.

Tucson, Arizona October, 1954: no rain for five years, a completely barren desert. The expedition is set up in a rented house on 50 acres about eight miles North of town near Oracle Junction. Closer observation reveals that the desert was a process rather than a static condition; a struggle of the land to live against the DOR infestation. With cloudbusting operations, much DOR was removed and fresh Orgone Energy was brought in from the Southwest (along the Galactic Orgone Stream). The immediate result was a freshening of the atmosphere and environment: gone was the parching dryness and gone was the blinding whiteness of the sky. Rainmaking was not the goal; in fact, noticeable results occurred prior to any rain falling on the dry sandy desert floor. By November, the barren desert North of Tucson began to turn green with a fine growth of new grass! In December, the greening of the desert had spread to cover an area 40 to 80 miles from Tucson with new grass up to one foot high! This happened without any rain falling, due solely to the fresh atmospheric Life Energy and attendant moisture from the Pacific ocean, 250-400 miles to the Southwest. These CORE operations attracted the unwelcome attention of flying saucers! (Energy alpha or Ea):

Disclosures regarding the Flying Saucers, such as noiselessness, bluish shimmering lights, rotating discs underlying their motion, fell into place with some of the facts I knew well from cosmic on energy functioning: functions such as silent operation which I had experienced when the on motor had been worked on in 1947-1948, or blue lumination in 0.5 micron pressure vacuum tubes. The old organometric functions came back, one by one, especially those which had dealt with the gravitational equation:

$$g \cdot \neq \ell \cdot t^2 \neq 100$$

The facts confirming these abstractions seemed to be at hand now, in a strangely practical manner. Things tied in further. Function after function coordinated itself with what I had read about the "unidentified objects." The final picture as of today is about this:

1. The "core men" (CORE = COSMIC ORGONE ENGINEERING), as I came to call them, apparently were thoroughly conversant with the laws of functioning in the cosmic on energy ocean, especially with gravity as a function of superimposition.

2. They use cosmic on energy in propelling their machines.

3. Their "blue lights" were in agreement with the blue color characteristic of all visible on functions, sky, protoplasm, aurora, sunspots, depth of moon valleys as seen at dusk, the color of on energy lumination in vacor tubes, etc.

4. The changes of color from blue to white or red, etc., I knew well from various studies of on phenomena and I had seen some practically in vacor tubes.

5. The core men were obviously riding their space ships on the main on energy streams of the Universe (see COSMIC SUPERIMPOSITION on "Galactic and Equatorial Streams").

6. The tremendous speeds which they were able to achieve were not in disagreement at all with the tremendous quantities I had calculated for the on energy streams of the Universe in 1940 to 1944. (There are still many gaps there, and many uncertainties. The tables of the kr^* number system are in my possession.)

7. A speed of 10 or 15 thousand miles per hour did not appear impossible in the light of these numbers; on the contrary: It appeared quite natural.

8. They rotated their discs in harmony with the on waves they rode on. Rotating discs describe exactly what I had calculated 10 years previously as the so-called krw ("Kreiselwellen") or SPINNING WAVES, without any knowledge of space ships actually riding cosmic on waves. From these waves, I had derived my mass-free equation:

$$C \cdot \neq \lambda^2 s^2$$

Things were fitting well, even too neatly for my taste. Therefore, I hesitated to tell anything to anyone about them. I only worried about what might have happened to the facts and equations which a student had acquired in 1947 to 1949. He had worked on the on energy motor, and he disappeared in 1949 under mysterious circumstances.

9. Just as space is not empty, light does not "come down to us from the stars and the sun." It is an effect of lumination in the on energy envelope of the planets. It is a local phenomenon. Therefore, there is theoretically no limit to speed in cosmic space, except technically. This agrees with the apparently limitless quantities in energy functions which characterize the organometric " kr^* system" as progressing in geometric proportions. These organometric calculations seem to be applicable to the technological problems of the Cosmic on Energy Streams.

THE Ea BATTLE OF TUCSON

Ea, DOR and Cloud Formation

The following theoretical work positions were held November 10, 1954:

1. DOR is the basic drought-causing and desert-supporting factor. There is some obscure relationship of DOR to water. DOR "eats mountains and levels them off to sand dunes."

2. Salara sand is caked, crystallized soil mixed with Orite.

3. Ea causes strong DOR and dissolves clouds, prevents cloud formation.

4. Ea can be weakened or even extinguished by drawing off energy with the Spacegun.

5. Ea has caused the deserts of the planet, supported by earthman's emotional desert.

The days and nights from November 6 to 9 were filled with DOR sickness, dispersal of artificially created clouds, appearance at irregular times and places of one to two Ea in the East. There was no DOR accumulation after successful drawing was performed on the evening of November 8th from the eastern Ea. The morning of November 9th was free of DOR. The mountains were clear, the valleys brilliant. Such changes from DOR to DOR-free days and vice versa, which followed our drawing operations, were most convincing. So was, too, heavy DOR following sighting of Ea or not drawing from Ea.



Fig. 23. The greening experimental area at Tucson

DOR removal operations were greatly facilitated by the arrival of the ORUR from Orgonon, Maine in December of 1954. This denatured Radium from the Oranur experiment had to be towed behind a chartered airplane in a special wooden container at the end of a 100' nylon rope. By January 1955, unprecedented rainfall was recorded in Arizona, New Mexico and throughout the Southwest.

Despite the local success of reversing the desert process around Tucson, it became clear that an area would have to be free of both flying saucer activity and the long range effect of nuclear activity in order to maintain the self regulating energetic metabolism that had been set up near Tucson with the cloudbuster DOR removal operations.

It was noted that there seemed to be a DOR barrier somewhere West of the experimental site in Arizona. Accordingly, a detachment was sent West to locate this concentration of DOR that was breaking up and dissolving the clouds and moisture flowing in from West to East. The DOR barrier proved to be near Jacumba California, stretching over 50 miles on a North-South axis with its Southern terminus in Mexico.

By March 1955, the expedition and equipment had set up shop near Boulder State Park just West of the DOR barrier. Continuous DOR removal operations, including ORURizing the atmosphere, were conducted for two weeks. By March 24, the barrier was breaking up with a black precipitate form of DOR ("Melanor") falling to the ground and turning the white sand dark. Cloud formations were now able to pass this area without dissolving and rain began to occur by the end of March.

During the expedition there was a series of atomic bomb tests conducted near Las Vegas. Concurrent with ORURizing activities, there were many publically announced postponements of the atomic tests.

Experimental Quest for the Ea Barrier

During the tug of war of January 12th, Ea seemed to have surrounded the Tucson Valley en masse; I conceived of the idea that this may be a routine measure on the part of spacemen to attack a certain region. It was known to me that there existed a sharp borderline between the green mountain ranges on the western slopes of the Sierra and the barren, eastern desert slopes. Was it possible that a "barrier" was set up there, which separated the green from the barren land? I decided to find out practically. Two operators went to the west coast 400 miles away, to find out whether such a barrier existed. *It did exist.* They reported from the Sierra divide that the clouds coming in from the West Coast did not pass but dissipated over the barrier on the dividing range.

The Barrier Yields

We arrived at Boulder Park on the divide late that day and made ready to start operations on the barrier the following day, March 6th. I saw that the clouds on approach to or while passing the barrier would dissipate exactly the way I had seen it happen over the observatory at Orgonon in the Oranur years, 1952 and 1953. The whitish, thick clouds would become fuzzy at the advancing fringes, the thin threads would dissolve completely until the whole cloud, no matter how thick would disappear, never to be seen-again in its original form. It was absorbed by DOR. This could be seen by its turning in color from white to steel gray or dirty gray and becoming rectangular. Steel gray, rectangular or fuzzy clouds are therefore always signs of the presence of DOR, as are the dirty blackish sky and the high background count. Both indicate effects of present or past presence of Ea.

The Nodes of Ea

By concentrating upon single regions, single objects, single riddles, we avoided confusion and reached efficiency. For example, it was found that an Ea is *energetically* not shaped round but is built like a long stretched-out double cone with two distinct focal points. We shall postpone a discussion of this fact. It has great bearing upon other terrestrial and celestial functions, for example the location of the origin of hurricanes.



Fig. 30. Ea-CM nodes*

* CM—Core Machines.

It appeared not impossible that in due time the atmosphere would be immunized against atomic explosions as one immunizes living systems against infection. Only those ignorant of the functional identity between organismic and atmospheric OR energy would be shocked by such an idea. A highly orurized atmosphere would syphon off any kind of DOR energy from atomic blasts or from Ea. We had the impression that there were difficulties in setting off the A-bomb.

Written during the winter 1955-1956 from Records of the Expedition OROP DESERT Ea, by Wilhelm Reich.

Wilhelm Reich

So much new material was gathered during this expedition which ended in April of 1955, that even today we have not fully absorbed it all. Reich's account of these historic months, Contact With Space, is only the first chapter in the new age of extra terrestrial contact.

WHAT THE FINANCIAL NEWSLETTERS LEAVE OUT

by
Trevor James Constable

Numerous readers of my Cosmic Pulse of Life (1976), have expressed their gratitude for the book's esoteric insights into world trends. Many orthodox analysts nowadays, mainly in the financial newsletters, are aware that the USA is being steadily and systematically destroyed from within. Politically, economically, spiritually and morally, the USA is being cut down through the actions of numerous eminent and influential Americans, most of them native born citizens. In all history, there has been no such treason.

Slowly the reality is sinking into the financial newsletter publishers that these malevolent operations are taking place on an almost inconceivably vast scale. As yet, there is little or no comprehension that the overall directing consciousness is not human, or that its scope and capacities dwarf the most brilliant human being into insignificance. This was dealt with in my Cosmic Pulse of Life, and warrants overview updating after a decade. Because of its very nature, nothing will appear concerning this kind of intelligence in the financial newsletters.

The earth plane is under preparation for the incarnation in the mortal body of Ahriman -- the third member of the Cosmic triad involved in Earth evolution. The occult sequence is the incarnation of Lucifer in Asia four millennia ago; the incarnation of Christ in the Middle East two millennia ago; and the imminent incarnation in the West of Ahriman, the spiritual suzerain of the inferior forces, i.e. the forces standing beneath Man. Nothing can prevent this event, for it is Cosmic in design and integumented into the whole drama of evolution. As incarnate humans, what we do control is our individual orientation and reaction to the Ahrimanic event, to which current world trends are a sinister precursor.

Dr. Rudolph Steiner has stated that ahrimanic goals include total control of the Earth, the making of the world wholly ahrimanic. Destruction, rigidification and enslavement characterize the advance toward ahrimanic control. Actions directed towards world control are all around us, cunningly masked by idealistic fronts, and we should be sharply aware that ahrimanic aims and agents always come to us as that which they are not. Those who are dismantling and undermining America purport to be impelled by common sense and idealism.

The secret orders and secret societies into which wealthy and influential Americans have been inducted, usually at leading universities, are for the most part ahrimanic organisms serving vast subversional goals in earth evolution. Highly educated men have to be led to believe that their clandestine activities are for the benefit of mankind, which is wholly in accord with the lying nature of the ahrimanic powers. Cultivated elitism runs strongly in such groups of men, and provides an avenue by which the ahrimanic powers access the individuals psychically. The greed and wealth of some of them places them under the control of those ahrimanic lieutenants commanding those spheres of action.

The secret activity has accelerated since World War I, synchronous with other preparations for the incarnation of Ahriman. Some of it has even peeped above the surface in the various "commissions" and "councils" such as those organized and

financed by the Rockefeller interests. These are typical ahrimanic fronts, carrying the clear ahrimanic signature of representing themselves as that which they are not. They have come to constitute a shadow government in America, by which the irritating impediment of elections may be circumvented. Diffusion of such unelected rulers into every significant level of government suffices to exert control, no matter who is elected by the public.

Ambitious political pushers quickly came to accept in America, that without the blessing and support of the shadow forces, they can wield no significant influence of any kind. Actual and direct control has passed in our time wholly to the shadow forces. Mere party politics and hoopla are part of the cunning duping of the populace, who fail to realize that the country is managed from the shadows no matter who stands in front of the TV cameras as president.

The heaviest shadow backing today lies behind the high-powered drive for World Government. Only one force in earth evolution stands to benefit from such an agency: Ahriman. To make the Earth wholly Ahrimanic requires political machinery, to manage the forthcoming attempt at enslavement of mankind. Ordinary citizens of rational mind are being systematically brainwashed to believe that "peace" can only come to Earth out of World Government. Institutions of higher learning support this goal, while their learned professors fail to discern that our present earthly governments are all run from the shadows and that World Government can be no different.

Avoided like a plague is the common sense reality: Earth has always been one world and is one world now. Within its diversity lies its unity. A World Government, bending all to a single authority, aims at the eradication of diversity.

The USA stood as a prototype of unity in diversity, with all the tribes of the earth brought under one banner, yet protected from each other's excesses by Constitutional government. The individual became the sovereign amid the mass. Failure of American government has not been due to its forms, but rather to corruption of individual humans who ensoul those forms: representatives, judges, leading elective and appointive officials. The Money Power has been the major earthly agency of this corruption, but it is absolutely essential to grasp that the corruptive impulse, the corruptive will, reside in the same extra-human source as is now illegally manipulating the whole world. The Money Power is the worldly instrument of the ahrimanic will.

Men who have surrendered the USA to dishonesty and corruption, now seek behind a veil of fake altruism, to bring the entire world under the control of international finance capitalism, which has replaced the obsolescent nationally-based capitalism of the past. With its sophisticated modern communications and unimaginable financial power wielded at the tap of a computer key, international finance capitalism is the ultimate ahrimanic instrument. Sovereignty and governments get in its way, impede its maneuvers and frustrate its appetites.

Nothing of these machinations appears in the full light of day, which is what you would expect of the powers of darkness. Control of informational media is central to the main ahrimanic design, and the limitation and rigidification of thought in America today strangely coincides with the so-called "information age", wherein the brightest people have not an inkling of what is really happening. Media control is responsible. Media clones intone about the "tides of history" as one impeding government after another is destabilized and swept out of the way of the ahrimanic powers.

Always these invasions of other people's lives, nations and affairs take place behind phoney protestation about violated human rights, fake moral outrage and synthetic morality. A free man aware of ahrimanic workings sees only one dominant tide in the material world: the tide of financial debt. Here is bondage for mankind on an unprecedented scale. Woe betide that nation or people that finds its way to solvency. Geopolitical targeting will ensue, and if need be, the entire life of that people will be convulsed with ahrimanic ruthlessness behind a moralistic facade.

Who issues the debt that results in international serfdom? The same forces that now back the lofty-sounding commissions and councils and clubs, all of them driven by their obsession for World Government. They really know not "whence cometh" their conscious thoughts about all this. The excarnate ahrimanic beings access them through subconscious actions, and we can expect that sophisticated developments of what exists on earth as radionics, exercise such control. By this means, the will of the ahrimanic powers is driven up into our world -- through these men of earthly financial and political power. Subversion of earth evolution requires earth plane action by earthly incarnates, who become literally the hands and feet of those spirit beings who are unable to function in this density.

Greed is the impelling motive that leads controlled human beings to distort and monopolize commerce, control natural resources, misuse technology and despoil the natural beauty of the Earth that is essential to the well-being of its inhabitants. Worst of all their crimes against mankind is the special corruption of education, so that each incoming generation is shaped to accept world corruption. The revivifying power of youth is thereby diverted into a frantic youthful scramble for a share of the spoils.

Men come and go from this plane. The scale and sequencing of the mighty events that are now climaxing, bespeak a superintending intelligence not afflicted with mortality. The periodic irruption of secret societies into the open at various points in history, at times when incarnates were needed to implement earth plane action, further supports the extra-human surveillance and supervision of anti-evolutionary machinations.

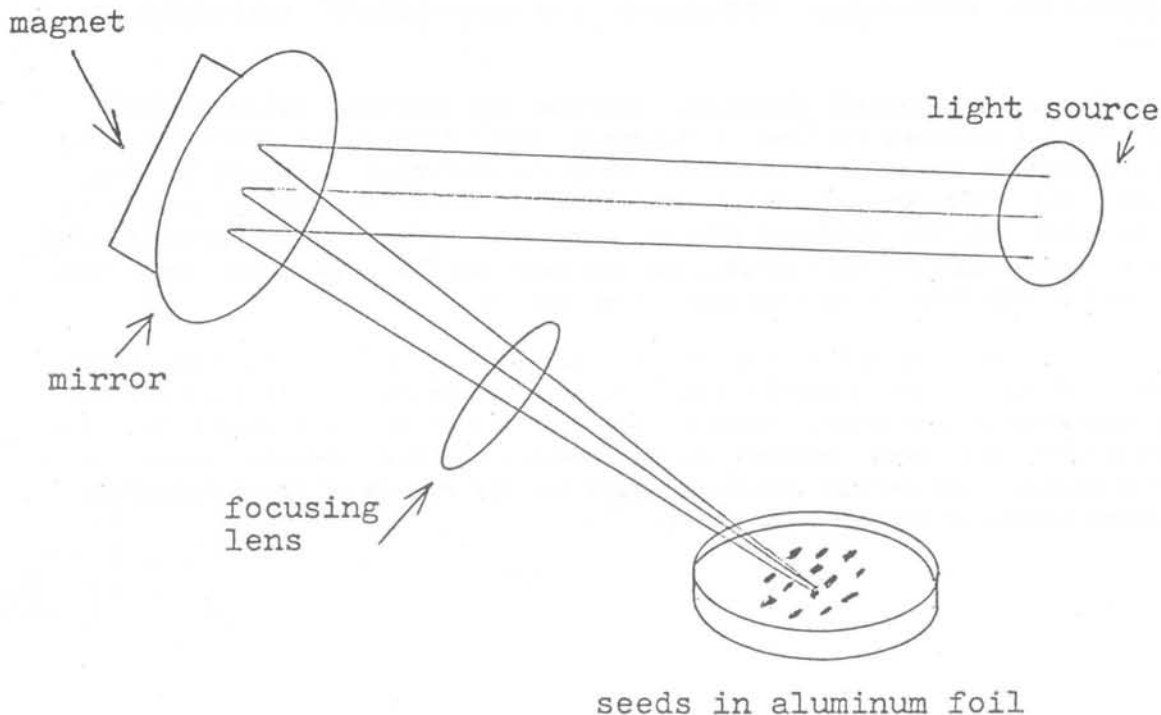
The moral, social, economic, industrial, political and emotional disintegration of the USA have all attained the kind of momentum that tends to be self-reinforcing. The ultimate ahrimanic obscenity is meanwhile being clandestinely prepared: political merger of the USA into the ahrimanic stronghold of the USSR. World Government can eventuate no other way. The ahrimanic minions who have worked for the destruction of the USA as a prerequisite for this merger, may not ever see the day when they will rule it all in the way they dream --without being elected.

Most of these misguided and greedy men are into their 70's. No matter what secret societies they belong to and regardless of their earthly eminence, they all face the inexorable democracy of the grave. Nobody ever plotted their way around that. These vain and deceitful men have pursued the enslavement of their fellows under false banners of friendship and service. There is solace for the victims of their wickedness in the grinding wheels of the Lords of Karma.

SYMBIOTIC ELECTROMAGNETIC ENERGIES

by
Dr. Edson Johnson

I'm researching what I call "Symbiotic Electromagnetic Energies" (S.E.E. for short), using the combined stimulation effects of electromagnetic spectrum energies (electricity, magnetism, light spectrum, ion effects, etc.). Symbiotic in biology means one organism being helpful to another, i.e. deriving mutual benefit from each other. In my research I have found the following: Take a strong light source (I use a car headlight), and shine that light on a mirror with a 500,000 gauss magnet placed behind it and then focus the reflected light through a 10 power or more lens onto seeds placed in an aluminum foil container. (The foil acts like a reflector of the focused light onto the seed scars, hilums as they are called botanically). Now, the seed scars (hilums) appear to open in this magnetic and light stimulation. It allows more water, carbon dioxide, oxygen and liquid fertilizer into the seeds, thus quickening the germination of the seeds and the result is accelerated plant growth!!! You can see this opening of the seed scars on radish seeds with a lens. I have given this method gratis to many agricultural organizations around the world and it is now public knowledge. This would be a good experiment for your BSRF Journal readers to try.



3.1415927...etc., etc., etc.

by

Michael Theroux

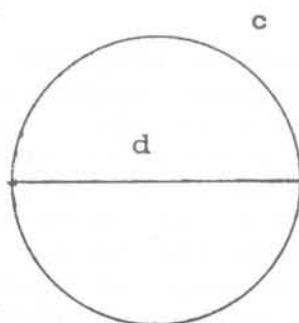
What kind of title is that for an article? Immediately, some of you will recognize that this endless number string is simply the formula for Pi. But what exactly is Pi? It certainly isn't just an infinite group of numbers used in calculation. So what is it?

The point I'm trying to make is that "Pi", expressed numerically, is an irrational number, meaning that it never ends. It seems that the use of irrational number strings has become the newest 'fad' in trying to show the relationship between one thing and another. I've noticed this in several books and articles which virtually explain away the mysteries by tossing around the decimal equivalents of incommensurable proportions revealing to 'you', the reader, that everything works out just swell. Either I've completely lost something in the translation, or I'm just not groovy enough to understand because most of the time I'm left thoroughly confused. If we look at ancient mathematics, we find that they had no decimal system with which numerical equivalents could be indicated. To the ancient mathematician the idea of an irrational number was a logical absurdity; an unacceptable contradiction which held no reason. But, a ratio (which incidentally is the Latin root of 'reason') was fixed and measurable, and therefore expedient.

A ratio is a comparison of two different quantities or sizes and constitutes a measure of difference expressed by the formula $a:b$. This is something that one can easily perceive and judge by the senses alone. You certainly don't have to have a college textbook by your side in order to understand a basic comparison between two things because it is a natural process of intelligence. The same holds true of a proportion, although a bit more subtle than the direct acknowledgement of a ratio. A proportion is a comparison of equality between two ratios, and is expressed by the formula $a:b::c:d$, that is to say "a is to b as c is to d". Obviously, the ratio and proportion are much easier to comprehend than a meaningless expression represented by a string of numbers. If the ancients had no use for irrationals, then I can see no reason why they are so widely displayed in literature today other than to confuse and mislead the reader. (with all due respect, it could be the authors who are actually confused) Anyway, let's continue by showing some concrete demonstrations of these ratios and proportions.

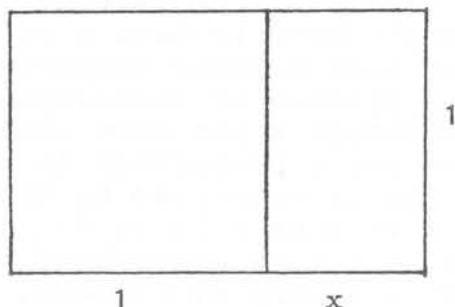
To answer our first question, Pi is the ratio of the circumference of any circle to its diameter. Most of us probably know this but seem to only remember the number which represents it. A recent article in Science News entitled "Pi Wars: Deuling Supercomputers" recounted the relentless pursuit of computers to determine the value of "that elusive number". Nowhere in the article is Pi referred to as a ratio. It's just another number to play endless games with. (by the way, "Tests show that the first 30 million or so digits do behave regularly as expected")

Shown below is an example of Pi.



d = diameter
c = circumference
c:d = Pi

Another of these proportions that has fallen into the hands of trend-setting mathematicians is the Golden Section or Phi ratio. Here again it is usually expressed as an irrational number where $\text{Phi} = 1.6180339\dots\text{etc.}$, but the Golden Section, like Pi, is first and foremost a proportion, derived from a geometric relationship and not a number. To observe this proportion, let's examine the Golden Rectangle below:



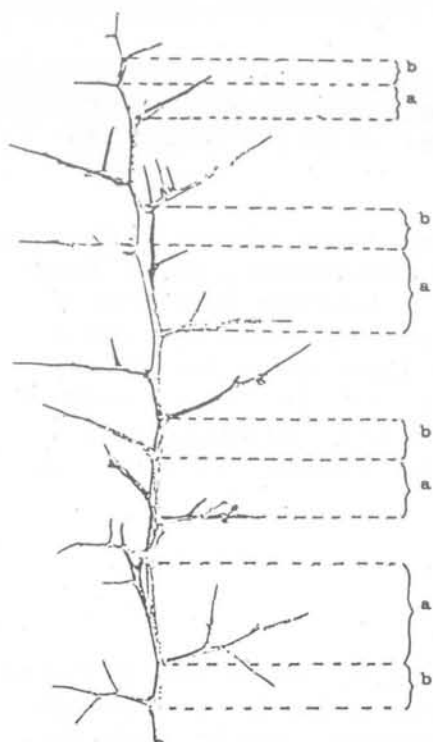
Where $\frac{1}{x} = \text{Phi}$
Expressed in a more mathematical way:

$$x = (\sqrt{5} - 1)/2 = \text{Phi} - 1$$

So the base has a length = $x + 1 = \text{Phi}$

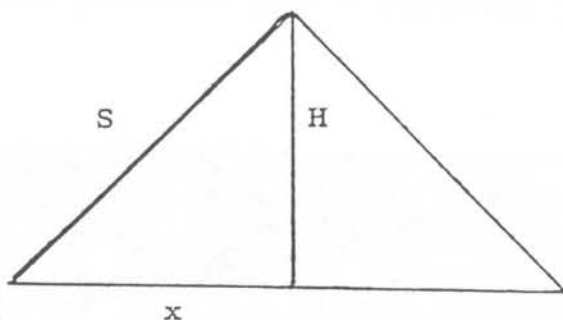
Both the ratio between 1 and x, and the formula above = Phi

It is well known that the Golden Section can be found throughout nature, and it is easily observable in plant life, such as in the following diagram:



a:b = Phi

Also, in the last few years there has been a lot of talk concerning the mathematical relationships of the Great Pyramid in comparison to things such as musical compositions, organic forms, and other structures of architecture. First let me state that there are two schools of thought, one of which says that the Great Pyramid was constructed according to Pi, and the other which says it was constructed according to the Golden Proportion. For example, the base of the pyramid divided by the height is equal to $\frac{1}{2}$ Pi. But upon closer observation we find that the Golden Proportion figures more prominently in the pyramid's construction:



Where; $x = \frac{1}{2}$ base
 S = Slant height
 H = Height

So that; $S:H = \sqrt{\Phi}$
 $H:x = \sqrt{\Phi}$
 $S:x = \Phi$

Thus, the three sides of the cross-sectional triangle in the pyramid are in a perfect geometrical proportion of $1:\sqrt{\Phi}:\Phi$. Although both Pi and Phi are to be found in the pyramid's construction, it would seem more probable that its construction was based on the Golden Section, and that Pi was merely an interesting by-product, but this is just speculation on my part. What I'm really driving at here is that in order to display a distinct relationship between the construction of the pyramid and something else, one must reveal

the comparison in proportional terms. You simply cannot show a definite relationship by adding together irrelevant strings of numbers, but if you explain that 'a is to b as c is to d', then one has no problem with its interpretation.

The real meanings of Pi and Phi presented here along with many other proportions to include the square root functions, have long been left to the ancient mathematician. Only recently has there been a renewed interest to understand these concepts in relationship to our universe. In order to do this we have only to think functionally and observe as did the ancients; not letting 'modern' technology cloud our intended views. So let's stop drumming up ridiculous fantasies from the astral lagoon of channeled knowledge and start learning the truth.

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A REVIEW OF MODERN ELECTRICAL THEORIES

by Professor Wm. A. Anthony

A paper read before the 42nd meeting of the American Institute of Electrical Engineers, New York, January 21st, 1890.

The general phenomena of electricity are familiar to us all. As children we learned of attraction and repulsion of electrostatic charges, of condensers, of insulators and conductors, of electric currents and electro-magnets, of telegraphs, and electric fire alarms and electric bells, of the heating of conductors, and even electric lights. We have long been familiar with the effect of the current on a magnetic needle, and with the attraction and repulsion of currents for each other. We have seen that these effects are manifested at a distance from the conductors which carry the currents, and we have been willing to believe that the distances at which these phenomena could be recognized were limited only by the want of sensitiveness of the apparatus through which the effects were manifested. Probably not many of us stop to think how these effects were brought about. We were content with a general statement of the relations of the phenomena, or, at least, with the determination of the direction and intensity of the forces due to a given conformation of current. We talked of the attractions and repulsions as action across space, and, if we thought of them at all as requiring any mechanism through which to act, we still felt satisfied when we had discovered and formulated the laws that govern the action of these forces.

It did not matter to us that attraction across empty space was unthinkable; it was enough that action took place, and that we could measure and, to a certain extent, control it. We constructed instruments and computed forces acting under certain conditions; we multiplied experiments and thought we had developed a vast science. But there have not been wanting, even among the earlier philosophers, some who could not feel satisfied with the idea of action at a distance. Experience gives no clue to any explanation of action of one body upon another at a distance, except through some intervening mechanism, and if we find cases where such intervening mechanism is not apparent, to say that in these cases action at a distance is taking place, is only to say that the action is unexplained.

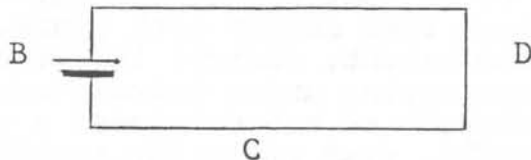
Gravity acts upon the distant planets, and, we believe, upon the most distant stars; but it is not enough to say that gravity acts, that it decreases as the square of the distance increases, we want to know how it acts. By what means or through what medium does our earth reach out to the distant planets and affect their movements? These are the questions that the dissatisfied few have asked in the past, and today it is not the few but the many who would be glad to have the question answered. Faraday early taught us that the mere statement of the law of electrical attraction or repulsion was no explanation, and he sought the explanation in the action in the intervening medium. He demonstrated by experiments, that have become classic, that the effect of induction depends upon the nature of the medium intervening between the conductors; a demonstration that here, at least, the intervening medium took part in the action and helped to determine the result. Magnetic and electro-magnetic phenomena were to Faraday also effects propagated through the medium; and Maxwell, following Faraday's work, subjected the whole matter to a searching mathematical analysis.

It was necessary, in order to complete the theory, to assume the existence of a medium in which the forces were exerted; but, as a medium had already been assumed to account for the phenomena of light, it would hardly be scientific to assume another to account for electrical and optical phenomena as well? Maxwell showed how the question of the identity of the two media could be tested, and our modern views of electricity are mainly the results of his work. What do we know of electrical phenomena? We know that pieces of glass and silk rubbed together and then separated attract each other; that the property of attraction can be imparted to metals if they are insulated; that if two such masses of metal be connected by a wire the power of attracting each other disappears, and at the same time, the wire is warmed and for an instant exerts magnetic forces at right angles with the wire. Numerous other facts we know, but these will suffice as illustrations of the phenomena. When a metal conductor is discharged by touching it with a wire we say the wire carries a current, and we have been accustomed to ascribe the heating and the magnetic effects to that current. We have looked upon the thing, whatever it is, that takes place in the wire as the origin of all that takes place around it. The current warms the wire, and it confers upon it the property of acting upon magnetic needles; but how does it act?

We cannot conceive of the action of that wire on that needle, except through something extending from the wire to the needle through which the wire can exert a push or pull. All around that wire the needle is affected; at considerable distances the effect can be exhibited, and we believe it is only want of delicacy of our apparatus that prevents our discovering it at the greatest distances.

A

Fig. 1



If the wire acts it acts through a medium in which it creates a disturbance, and the disturbance in turn acts upon the magnetic needle. But are we sure that the action begins with the wire? Is it not possible that the action begins in the medium, and that the wire merely separates portions of the medium and so permits action that would not otherwise take place? Maxwell has proposed a mechanical illustration of the action taking place in space when electrical phenomena occur, and Fleming and Lodge have elaborated it and brought it within the reach of non-mathematical readers. Let us suppose all space to be filled with wheels connected by idle wheels in such a way that when one turns all must turn in the same direction, except that the elasticity of the system permits a small movement of one wheel before the others in the vicinity begin to move. Electromotive force is then something that tends to turn the wheels. Let B in Fig. 1, represent some source of electromotive force; A and C conductors not forming a closed circuit but having an opening at D. The electromotive force at B tends to turn the wheels, but so long as the gap exists at D the wheels are connected through all space, and the E.M.F. at B can effect nothing except to turn the wheels through a small angle until the elastic resistance balances the E.M.F. In the conductor, the wheels are not supposed to be rigidly connected. They can turn by slipping on each other, and the wheels in space may turn by slipping on the wheels in the conductor; hence, as the ends of A and C approach each other, the connection between the wheels within

the enclosure and those of outside space becomes smaller and smaller, and, when the conductors touch, there is no longer anything to prevent the wheels within from turning, and they begin to spin in obedience to the E.M.F. at B. The conductor is heated by the friction due to the slip of the wheels around and within it. The spinning of the wheels constitutes the magnetic forces if we assume the wheels, originally spherical, to become flattened spheroids by the spinning, and to be forced to remain in contact at their poles. Assume the wheels to have inertia, and it will require time for them to reach their full velocity, and the time will be greater as the number of wheels is greater, that is, as the magnetic forces developed are greater. On the other hand, the wheels will not at once stop if the electromotive force is removed, and if the conductor be broken at some point, allowing the rapidly spinning wheels enclosed by it to come in gear at that point with the stationary outside wheels, there will be, for a brief time, until the moving wheels can be brought to rest, a clashing and disruptive action known as the extra spark.

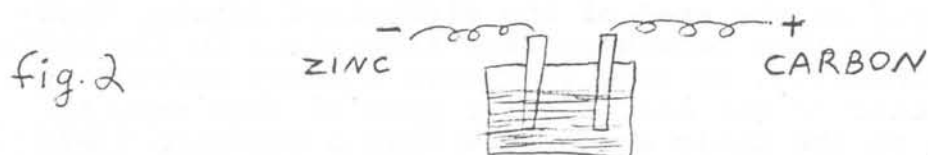
I have spoken of the heating of the conductor as due simply to the friction of the spinning wheels upon the wheels within the conductor. The greater the friction the greater the motion imparted to the wheels within the conductors and the greater the heating. The less the friction the less the heat, and if there were a substance those wheels could revolve among themselves and against the wheels of space without friction, such substance would form a perfect conductor which would offer no resistance to the motion of the wheels in the space inclosed by it, and however rapidly those wheels might revolve they would have no influence to produce motion within such a conductor. We are led, then, to this, that a perfect conductor, instead of being a substance in which any E.M.F. produces an infinite flow of electricity, may be a substance in which no effect whatever is produced.

I do not present this as representing the real activities involved in electrical phenomena, or as a theory by which all electrical phenomena may be explained. I give it as bringing prominently into view the activities in the medium surrounding the conductor; whereas, the language in which we usually describe electrical phenomena points to the conductor itself as the seat of the electrical forces. Whatever our theory, we know that something does take place in the medium that surrounds the conductor. We know that were a heavy current to flow through a conductor in the most distant part of this room a delicate needle here on the table would show that a magnetic field was produced here. We are certain that magnetic lines of force from the electric currents on our streets, whether overhead or underground, permeate this room, and traverse our bodies even, though we have no sense through which we can become directly conscious of them. Take in your hands two wires connected to the poles of a battery or dynamo and touch their ends together. You see a flash of light, the wires become warm, they attract iron filings; coiled into a spiral they will attract with great force large masses of iron; two such spirals will attract or repel one another. What more natural than to say: Here in the wire is a new activity which warms it and confers upon it magnetic properties? What more natural than to forget or fail altogether to recognize the activities in the space around; activities that do not impress any of our senses; that do not wrench our arms, or burn our flesh, or blind our eyes; and yet it is well to fix our attention for a while upon the space that the conductor encloses, and recognize the fact which the little delicate needle demonstrates to us, that something is going on in that space, something quite as

important, perhaps more important, than that which takes place in the conductor.

Whatever the magnetic forces are, we know they cannot be called into existence instantaneously. Time must always elapse before the full effect of an electric current is felt, and the greater the forces developed the longer are they in reaching the maximum. Moreover, the current in the wire cannot be at once developed; it keeps pace with the magnetic force and reaches a maximum only when the magnetic forces reach a maximum. This is exactly what would follow if magnetic forces result from the setting in motion of wheels possessing inertia. Whatever magnetic forces may be, they begin and end like the motions of massive bodies.

Continuing our hypothesis, an electromotive force would be anything that tends to set the wheels in motion. The wheels are set in motion if a limited number acted upon by the E.M.F. are separated by a conductor from the other wheels of space; but, even if they are not separated, that is, if the conductor does not form a closed circuit, the wheels are rotated through a small angle depending on the elasticity of the wheelwork. This displacement constitutes an electric charge, the tendency of the wheelwork to spring back is difference of potential, and this difference of potential is maintained by the E.M.F. Here allow me to call attention to the distinction between difference of potential and E.M.F. I often see statements that indicate that the distinction is not clearly kept in view. In that excellent little volume, the Dictionary of Electrical Terms, the statement occurs that electromotive force is due to difference of potential. It should rather be difference of potential is due to E.M.F. Difference of potential is an electromotive force, but not all electromotive forces are difference of potential; and, furthermore, I can think of no case of difference of potential that does not owe its existence to some other electromotive force, not difference of potential. Difference of potential results from a changed electrical distribution, an electric strain, and represents the tendency to return to the state of equilibrium. Electromotive force is the something from without that produced the electric strain.



Consider our wheelwork illustration. I may seize a wheel here and turn it, but I can only turn it through a small angle before the elastic forces, brought into play by the distortion, balance the force that I am able to exert. My force is electromotive force, the elastic forces are difference of potential. Let Fig. 2 represent a voltaic cell with its copper and zinc plates and dilute acid; we know that something takes place by which the copper becomes positive and the zinc negative, and, if the copper and zinc be joined by a wire, electricity is said to flow from the copper to the zinc through the wire, and from zinc to copper through the liquid. The flow through the liquid used to be explained by assuming the zinc to be positive and the copper negative within the liquid; just the reverse of what we find without. But connect the copper to the zinc by a wire under the liquid, the current flows through the wire from the copper to the zinc. The copper, therefore, is not negative, but everywhere positive. Then why does the current set from the zinc to the copper through the liquid? Because there is an electromotive force, not

difference of potential, mind you, for the difference of potential tends to cause a flow the other way, but a something that forces the current through the liquid against the electric pressure. The cell is an electric pump that pumps electricity from the zinc into the copper until the pressure becomes so great that the pump stops. Open a passage from the copper to the zinc by connecting the two by means of a metallic wire, the electricity flows and relieves the pressure, the pump begins to work and so maintains a continuous flow. No; E.M.F. is not difference of potential although difference of potential is E.M.F. It is even possible to produce an electric current without any difference of potential whatever in any part of the circuit, just as it is possible to produce a flow of fluid without any difference of pressure.

Whatever difference of potential may be, it behaves like a force developed by an elastic displacement in a solid body. Whatever magnetic forces may be, they behave as though produced by the motions of inert masses. An electromotive force, suddenly brought to bear at a given point, has to overcome not only the elastic force but the magnetic inertia. In other words, an electromotive force, tending to produce current, immediately develops a difference of potential against which it must act, and also develops magnetic forces which retard its action; so a fluid-moving force meets opposition in the elastic force of the fluid and in the inertia of its particles. But the effect of any such force is propagated through the medium with a finite velocity expressed by the well-known formula.

$$V = \sqrt{\frac{E}{D}}$$

Electric displacements ought, therefore, to be propagated with a finite velocity which should have some relation to the ratio between the electrostatic effects, analogous to elastic displacements, and the electro-magnetic effects analogous to the effects of moving masses. You all know that it is shown that this velocity is expressed by the ratio of the magnitudes of the electro-magnetic and electrostatic units quantity, and you know also that determinations of this ratio show it to be the velocity of light. This determination gave a very strong support to Maxwell's electro-magnetic theory of light, and, coupled with the fact that observations, so far as they went, indicated that magnetic effects are propagated from the sun to the earth with the same velocity as light, made the theory at least extremely plausible. But within two years the wonderful experiments of Hertz have demonstrated beyond question that electro-magnetic waves travel through space from every source of alternating currents or potentials, and that the waves travel with the velocity of light.

In this city there are, I suppose, many alternating current systems. When we think of these in action we are apt to think only of the activity in the conductors of the machines, the lines, the transformers, the lamps, and yet we know that in all the space around there is activity. Waves are chasing each other through this room, through our streets, our houses, our offices. They are everywhere present. We are bathed in this agitated medium every moment, and yet we live, and not only live, but are totally unconscious of the activity that surrounds us. No sense responds to the wave motion that fills this space. And yet, when these waves become short enough

and frequent enough, they do affect our sense of vision and a vast array of phenomena that otherwise would have had no existence for us, are made known to us through this special sense. But the eye only responds to waves of $1/70,000$ to $1/37,000$ of an inch in length, while the length of the waves emitted by one of our alternating current systems is 600 miles. The waves that affect the eye must occur at the inconceivable rate of at least 400 millions of millions per second, while less than 300 waves per second are emitted from our alternating systems. These waves come very far short of the number necessary to affect any of our senses; but we have been able to demonstrate their existence, at least we have been able to show that something possessing all the characteristics of wave motion exists in the space around a source of alternating currents or potentials.

It is something to know that waves of such enormously different lengths and frequencies exist in the medium that is agitated by waves of light. It is something to understand that our sources of alternating currents are centres of radiant energy, differing from light only in wave length; and since we have begun to appreciate this fact, we have often asked ourselves the question: Can the rate of alternation be increased until the whole apparatus should glow with light? Although the enormous rapidity required seems to render this direct solution impossible, it seems to me there must be a way to obtain the light we want without all this waste of energy. I cannot believe it will always be necessary to develop waves of all lengths from many miles down to a hundred thousandth of an inch, in order to obtain the narrow range of wave lengths by which we see. I do not know of any practical way of obtaining the few wave lengths that constitute light without at the same time producing the others, but it is done. The glow-worms do it, the fire-flies do it, the lantern beetles do it, and I believe the time is coming when man can do it.

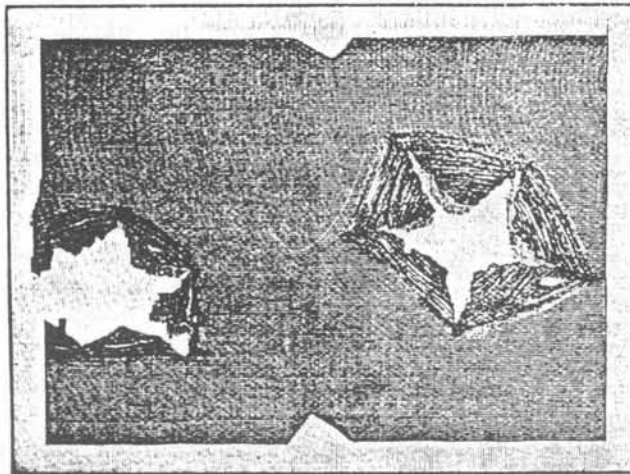
Instead of getting 10 16-candle lamps per horse-power we ought to get 200. I don't know how it is to be done. I don't expect we are going to make alternating machines to produce 500 millions of millions of alternations per second. But possibly we may solve the problem indirectly by the use of some substance having a special rate of vibration, such as the gases. Possibly we may be able to excite electrically the fluorescent salts. Possibly we may be able to charge and discharge a condenser and take advantage of the oscillatory discharge to set up vibrations of the frequency required. Possibly we may discover the secret of the glow-worm and fire-fly and substitute electric for the insect energy. I know it will take several fire-flies to equal a 16-candle lamp, but it will also take a good many fire-flies to develop a horse-power. But although I do not see at present any practical solution of the problem, I repeat, I believe the problem can and will be solved. We are not going on forever burning a coal mine whenever we want a little light. Neither are we going on forever converting the energy of coal into heat when it is mechanical or electrical energy we want. From the very nature of things not more than one-fourth or one-third the heat so produced can be transformed into any other form of energy. The energy of fuel can be converted into mechanical energy without first becoming heat. It is so converted in every animal movement. The way exists; let us find it. Find this, and the way to make light only, when it is only light we want, and we shall have lengthened

the life of our coal deposits five or ten times. The man who solves either one of these problems will be the greatest discoverer of this or any other age. If he gets a broad patent on it, he will have seventeen years of the grandest litigation the world ever saw.

Now I can imagine that some electrician will consider that the first part of this paper dealt with matters that are of no practical consequence in the use of electric currents. Of what practical consequence is it whether force is conveyed to a distance by means of a medium or simply acts at a distance. What does it matter whether electric energy is conveyed by the conductor or through the dielectric? We know how to proportion and dispose our conductors to produce a given effect, and that is enough. But consider what we have learned already of the intimate connection between light and electricity, and I think you will agree that the more we know of the ultimate nature of electricity the nearer we shall be to the solution of the great problem to which I have referred, and the solution of either one of those problems would revolutionize some of the most important industries of the world. May not the solution of at least one of these problems be accomplished and the results exhibited at the great exhibition to be held in 1892? What a wonderful achievement it would be to light all those great buildings without heat, or drive all that vast array of machinery without a fire!

A DAMAGED LIGHTNING PROTECTOR.

The accompanying figure, taken from *La Lumière Electrique*, is a full-size representation of the sheet of paraffined paper which is placed between the line and earth plates in lightning guards of the gutta-percha sheet pattern. During the storms of July last the paper of the lightning guard at the Gréasque (Bouches-du-Rhône) office was perforated as shown. The perforations were nearly 30mm. across, one being very much like



a star-fish, while the other was not so well defined. On the plates there were blackened facsimiles of the rents, and in the centre of each black stain there was a bright spot formed by a drop of melted metal. Under normal conditions the paper is pierced only by one or two holes, such as would be made by a pin, these holes being surrounded by a black or a red aureola about 3mm. or 5mm. in diameter.

THE ELECTRICIAN, OCTOBER 5, 1888.

TURNING POINT CHERNOBYL
by Albert Zock

It was about 7 AM at the Swedish nuclear plant "FORSMARK" north of Stockholm, when the alarm light went on. Geiger counters reacted wildly, suprisingly not as much within the buildings, but in the open. Survey technician Bengt Wellman could not understand why in the open? The background, as it is called, instead of the usual 4 clicks per second, rose to over 100 clicks. Reports from other observation points in the country and Finland were the same. Scientists analysed the spectrum of the radioactive particles and came to the conclusion the source had to be in the region of Kiev.

At the same time the people in Kiev did not know that two days ago, north of them, a general nuclear accident (GNA) had taken place. An inferno so remote, as scientists the World over assured us, could only have happened once within ten or a hundred thousand years. The population shopped as usual for fruits or vegetables and decorated their houses for the First of May celebration and the local brass even organized a football match.

On Friday, the 25th of April, fire chief Major Leonid Teljatnikow, 35, commander of the 28 man military fire brigade, and responsible for the fire safety of the nuclear plant, looked ahead to a peaceful weekend, which marked the beginning of many celebrations. Starting with the First of May, followed by the Russian orthodox Easter holiday, and ending on May 9th with the anniversary of the Victory over Hitler's Germany. From the 17 maintenance men in block 4, ten were already on holiday, the whole plant was in the hands of a skeleton crew. With Spring, the time for the annual inspection, and because of some experiments on the way, reactor #4, normal output 1000 megawatts, was reduced to only 7% of its capacity - and even this small charge was enough to start a holocaust.

Chernobyl (Tschernobyl in Russian, meaning black glass) was Russia's pride; "Tschernobyl - the Pearl in the Constellation of the Atom," wrote the newspaper Pravda on its opening day. Besides its 1000 megawatt electro energy, Block 4 was also a breeder for Plutonium needed to manufacture atomic bombs, a reason why no international commission was ever invited to visit its site and no reactor of this type was ever exported.

How could an almost shut down reactor create such a catastrophe? The reason is the oldest in the world - Human Error!! Survivors of the nightshift later recalled to have heard muffled noises and shortly afterwards a sharp sizzle - like escaping steam. At 1:27:40 AM on Saturday, April 26th, an immense explosion shook the reactor hall and its pressure burst through the roof. Over the Pripjet river a glittering firecolumn 100 feet high, shot into the dark sky - the impossible had become reality and further reactions were to come.

The muffled noises, which first had been heard, came from what is known as "Nuclear-Excursions", in this case they caused a jump of the energy level from 7% up to 50% within 10 seconds. The reactor, a real monster with its 1700 tonnes of graphite, hundreds of Zirconium pipes, fuelrods with almost 200 tonnes Uranium, 1600 high pressure water pipes - 27 ft. high and 37 ft. in diameter, equal to 1500 Hiroshima bombs, is at low capacity, sensitive and dangerous.

In a model like the REMK a nuclear excursion can take any place anywhere at

any time on purpose or not. Usually such "critical mass" can be controlled by the use of its 180 Boron control rods by lowering a few or all with the help of a crane, into the reactor. Boron absorbs the excess of electrons, lowering the chain reaction or even stopping it.

The engineer on duty tried just to do that, but he miscalculated the situation as the heat was already too high. Secondly, at 7% capacity less cooling water circulates within the Zirconium pipes. The quick rise of the energy from 7% to 50% within 10 seconds, caused a quick rise in heat converting the cooling water into steam which caused additional heat. Since steam is a lesser conductor of heat than water, the temperature around the Uranium rose further, probably up to over 1,800 degrees F.

At this temperature, the chemical reaction between the Zirconium of the pipes and hot steam, created hydrogen gas. The pressure finally burst the container. Extremely hot steam escaped, together with the hydrogen gas from the reactor - this was the sizzle the survivors heard - now nothing could stop the catastrophe. The big bubble of hydrogen gas which had collected in the reactor hall, after coming in contact with oxygen of the air, diffused itself with a fire-like explosion blowing out a great part of the roof. The same, but controlled chemical reaction is used in the space program to launch the space shuttle and rockets into orbit, (see "Diffusion a la Victor Schaubert" in BSRF's publication IMPLOSION).

High flying concrete parts loosened the 200 ton heavy loading crane, which toppled on top of the reactor breaking its cover and water pipes, eliminating all cooling and causing the heat to rise further. But worse, the chain of circumstances caused more chemical reaction between Zirconium and steam, the red glowing graphite block caught fire, creating not only more heat, but releasing free particles. At this point the whole nuclear plant was in jeopardy, the fire had spilled already to Block 3.

Major Teljatnikow rushed with his fire brigade to the scene, the fate of Chernobyl lay in their hands, additional help from Kiev would take a long time. Teljatnikow and his men know, whatever happened, the fire must be brought under control. They climbed on the roof of the turbine hall where the fire was fierce and smoke made breathing almost impossible. Under the tremendous heat the Bituminous cover of the roof started to melt, holding the boots like glue. From minute to minute it became harder to move, but no one gave up. Heroism does not discriminate between race, creed or ideology. Under such conditions the men fought for three hours, finally about 5:00 AM the danger was over. Their self-sacrifice saved not only the remaining three reactors, which technicians in the meantime had reduced the output of to almost zero, but it probably saved lives and suffering of who knows how many people in Western Europe.

Twenty three of Leonid Teljatnikow's fire fighters died within six weeks. However, the first victim was Walery Iwanowitsch, a technician, who died right at the explosion under falling concrete debris. His body could not be recovered and the reactor became his tomb. His colleague Wladimir Nikolajewitsch, another mechanic, caught fire as the incident started. Despite his burns, he managed to get out of the building, his last words, before he collapsed were, "Walery - in there". He too had not an orderly funeral. The ambulance attendants, scared of radiation, buried him in the cemetery of the nearest village.

In the following weeks, even at a distance of 1,200 miles from the source, geigercounters rattled wildly. Changing winds moved the radioactive mass crisscross

over Europe, even over Monaco.

It has been estimated that in the coming three decades, over 10,000 Poles alone will die from radioactive related cancer. But a Russian report to the International Atomic Energy Agency in Vienna estimates only 6,250 deaths within the coming 70 years. The "New York Times" which obtained a copy of the report, writes; 4,750 deaths in the Soviet Union and another 1,500 deaths can be expected from thyroid cancer in people consuming contaminated milk and food. The report also mentioned that about 3.5% of the radiation of the reactor escaped into the atmosphere.

Chernobyl proved the atom apostles wrong with their calculation that an accident like this would only happen once within ten thousand to a hundred thousand years. How safe is nuclear energy after all? According to a nuclear expert Bennet Ramberg at the University of California, there is a distinct West to East imbalance. At the lowest end of the scale even below the East block countries, is Russia, about in the middle is the US and on top stands West Europe.

The disadvantage and risk of a RBMK reactor lies first in its entanglement of pipes. Secondly, if a leak occurs, the reduction of cooling (compared to a lightwater reactor in the West) will cause the heat to rise and will enhance the moderation of the graphite causing the reactor's output to rise, the heat will increase further and a catastrophe is just around the corner. But with a light-water reactor, if the cooling for some reason decreases, and as the water not only carries the heat away but (instead of graphite) moderates the flow of neutrons at the same time, the energy output drops and the chain reaction stops, giving time to remove the fuelrods.

Chernobyl may be the biggest incident so far, but it is not the first one. In an incident in 1957 at the British plutonium breeder "Windscale," similar to the accident at Chernobyl, over 100 channels of graphite caught fire. It took two days to extinguish the smoldering core, even so most of the uranium rods had been removed, and only after the reactor was flooded. A hydrogen gas explosion, as presumed, did not occur. Over 500 square kilometers got polluted and for ten years the reactor remained "tabu" before it could be dismantled. After 25 years the British Atomic Energy Commission admitted that 40 persons died of radioactive related cancer.

An experiment in 1966 at the breeder-reactor "Enrico Fermi" near Detroit, lead to a partial core melt-down because of a failure of the Sodium cooling system.

In March 1975, electricians working with open candles in a cable duct of the Brown's Ferry reactor in Alabama, caused the cables to catch fire which shut down the entire control center, putting even the emergency cooling system out of order.

Only 30 minutes separated the Three Mile Island reactor in March 1979 from a total core meltdown. A series of mechanical defects caused a partial destruction of its core.

Chernobyl is a turning point in many ways. It will not eliminate nuclear reactors in the near future, but it will foster more caution in nuclear safety. Not so much in Russia itself: The race for mechanization of its industry has been blinding. It tries to replace safety factors because of financial reason, with reliable personnel. It also made the Russian people realize that accidents can happen in their country as well. Up to now, newspapers only reported accidents

abroad, lulling its readers into a non-existing feeling of safety.

It also proved nuclear warheads useless on short and middle range missiles, because of its drawbacks. It puts them in the category of the deadly gasses used in W.W.I. As the deadly gases were released, with the help of favorable winds towards the enemy, very often the winds shifted blowing the gas back and creating havoc among their own. After WWI everyone was talking about the horror in case of a future war as the gases and their application would be more improved upon. As WWII came, each side had stockpiles of gas but no one dared to be the first to use it, not even a desperate Hitler.

Chernobyl may even have other fringe benefits as well. In any case of radioactive fallout there is a tapering off of its density toward the outside of its spectrum, the remaining minute amounts may even then be beneficial to some man, animal or plant, causing perhaps an evolutionary jump.

In 1903 Dr. M. Danysz at the Pasteur Institute, undertook a startling experiment by placing flour worms, *Ephestia kuehniella*, with some flour into a glass flask and exposing them for four hours to radium. He prepared a control flask as well. After several weeks most of the larvae exposed to radium were dead. However, some still lived and they kept on living as larvae, not changing into moths as the larvae in the control flask did, hatching their eggs and producing more moths. Four full months after the exposure, one larvae was still alive, it had lived three times the lifespan of its fellows in the control flask without changing into a moth. It was as if a twenty one year old person kept their young appearance for 250 years.

For some unknown person, animal or plant, Chernobyl may become a fountain of youth, and if such exception encounters more Chernobyl like experiences, they may live happily ever after, without any population increase -- what a future for this planet.

But for most of us - nuclear fallout is most dangerous to our thyroids, which cannot distinguish between radioactive or not radiocative iodine. To protect thyroids in case of radiation, IOSAT should be taken, a drug containing potassium iodine. When potassium iodine is taken, it fills up the thyroid which in turn will reject any radioactive iodine in the surrounding atmosphere. IOSAT was only distributed to state and local power plant workers. Even so, it is approved by the FDA to be sold over the counter.

Alan Morris in New York fought three years in the course for the right to manufacture and sell IOSAT to the public, and he won. IOSAT is now available from AMBEX Inc., PO Box 861-K Cooper Station, New York, NY 10276.

In an age like today - no home, especially ones close to a nuclear power plant should be without it. A new preparation is ISOTECK, distributed by Bon Vie Products, Box 28665, San Diego, CA.

Clips, Quotes & Comments

by Tom Brown

THE SECRET OF LIFE

Science today seeks to understand the nature of our manifestation by smashing subatomic particles at higher and higher speeds. Hundreds of millions of dollars are spent building bigger and bigger atom smashers. The scientists seek the elusive final building block of nature. With the myriad of particles (or what they may believe are particles) the orthodox science of today has created a religion of obfuscation patterned on the life destroying aspects of nature. Verily, they will never find an answer because there is no final answer to the confusion they have created other than destruction of the living systems of the creator.

While these scientists waste their time and effort on their techno - religious searches, Mother Earth is dying from the effects of "scientific advancement." Scientists who present the formative aspects of life are vilified or ignored. If science was truly on cue, Wilhelm Reich's work would be taught in the universities. Trevor James Constable has shown the true bio-energetic nature of the etheric atmospheric flows and his work remains unfunded and generally ignored. This is understandable because the living energy is spiritual energy and science denies the spirit because it cannot objectify it using its present modes of thought.

Borderland Researcher Eric Dollard is in the process of making a tremendous contribution to understanding the living formative forces of nature. Reich gave us his Cosmic Superimposition theory on how two out of phase galactic orgone flows form the familiar galactic vortex we see in the sky. Eric has shown in his work that there is a direct relationship between the orgone and the dielectric field, the ignored, living aspect of electricity. With Eric's most recently built high frequency transformer he can produce two dielectric fields which are 180 degrees out of phase. To see what is happening in these fields, plasmas effects are studied by placing old light bulbs in the superimposed fields. Old light bulbs are used because they are donated free and there is no money yet for the proper plasma equipment. (Many thanks to Borderlander Wayne White of L.A. Water and Power Co. for taking care of us!)

In the past, on a single phase coil of Eric's, I have seen living forms appear in the bulbs. I have seen organic shapes looking like plants, microscopic life forms, and macroscopic scenes like streams of stars and spiraling fireballs. Of course it could be said that by naming objects seen we are just showing our inner psyche as per the Rorschach test, but there are definitely organic archetypes appearing. Each bulb is different and 1 in 10 makes an interesting effect. It should also be kept in mind that these plasmas we are talking about here are of a higher order than the "yuppie lights" now available from various sources using a bulb on a small coil.

I saw these forms on Eric's Tesla Transformer he built with a donation from Dr. Robert Beck and parts salvaged from old TVs in the desert. Millions are available for atom smashers to study life by smashing it and only grass roots support has appeared for research where living patterns can be studied. All technology could be easily condemned but we are only taking general complaints from those who don't use autos, electricity, telephone, etc. I hope that all of us are in favor of a beneficial technology, in harmony with nature.

GOD IN A LIGHT BULB

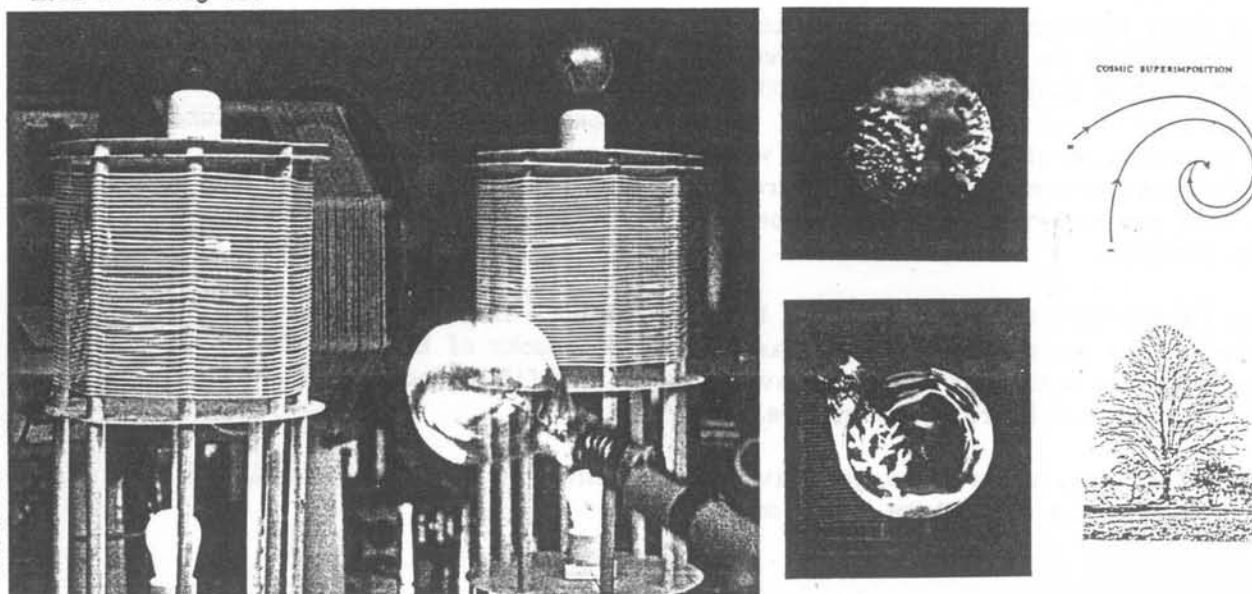
Eric's latest double phase coil setup took a while and is really not finished, but it has already produced some interesting effects. We have taken both still and motion pictures of the discharges under various conditions but do not yet have the facilities to reproduce on a clear level in this Journal, though several are photocopied here to give an idea of the patterns. The 16mm movie footage we've shot is being placed onto video, and we would like to thank Trevor Constable for the donation of the 16mm camera. The most interesting effect that I saw didn't make it onto film but I'll never forget it.

While filming and just generally observing the bulbs and discharges I observed open air discharges of several feet looking like different types of foliage as the frequency and pulse width were changed. The bulbs produced some interesting plasma balls and star streams. These star streams are amazing, I've had to rub my eyes to see if I was really seeing them. One bulb was producing some promisingly different looking forms and as I watched the movement in the bulb I saw a galaxy take form. It looked like a special effect on an outer space destructo film, but it was really happening. This effect lasted for a fraction of a second and then the bulb violently exploded. When the bulb exploded a huge mass of energy rose like a living Jacobs Ladder between the two extra coils on the apparatus.

It is interesting that the bulb exploded because I saw an implosion taking place inside. It is my theory, and it is just that -- a theory, that the ether or orgone, or whatever the subtle substratum of manifestation may be called, is being condensed just as the galaxies condense from the periphery of space towards a center. As the ether condenses, the ambient pressure in the bulb increases. We see the possible manifestation of a demonstratable ether pressure happening as the etheric matter forms an organized pattern. This self organization being viewed in the fields around Eric's research apparatus could be a laboratory model of Reich's Cosmic Superimposition theory!

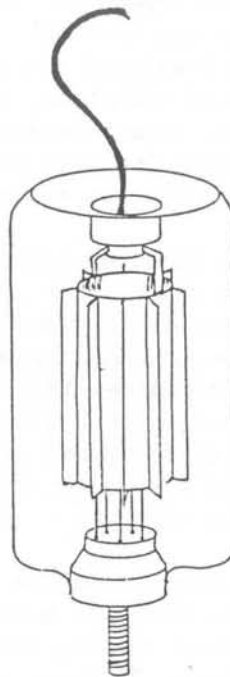
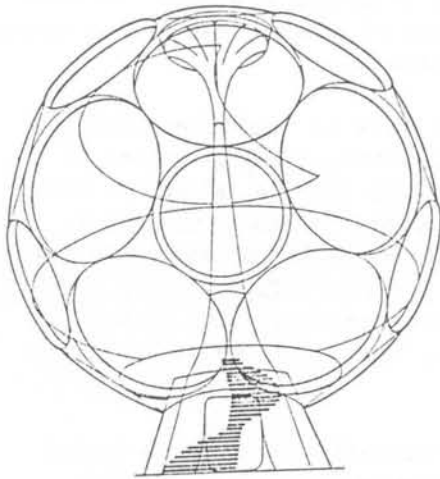
Eric has also demonstrated the Tesla one wire broadcast of energy to myself and others and at the February meeting of the Los Angeles Chapter of the U.S. Psychotronics Association Meeting chaired by Bob Beck, National President and Vince Wiberg, Chapter President. Theories without manifestations produce experts and we have far too many of them these days. Real progress comes from real research and Eric is doing it!!

Photos: Zoraida Abresch



THE PASSING OF A FRIEND

Our friend and fellow researcher Philo Taylor Farnsworth III recently passed on to the spirit world. I want to give a special mention for Philo because we were engaged in a project at the time of his death. Philo was an gentleman and a scholar whose inventions were designed to benefit humanity at large. He developed a modular house called the YANTRA HOUSE which is pictured below. This is low cost, highly efficient housing which will weather hurricanes and earthquakes and the circular shape certainly will have an expanding effect on consciousness. The Yantra House is built from prefab modules and cost to build in the 1970s was about \$2.50 per sq. ft. The air circulation pattern is an evolving torus and the entry is a double helix. It appears that Philo tapped an archetypal level of nature in designing this house. I guess that the world wasn't ready for such a beautiful concept in living.



I met Philo through Eric Dollard at the Integratron last year. I found that Philo was interested in reproducing an invention of his father's, Philo Farnsworth II, the MULTIPACTOR TUBE. The multipactor tube is an energy multiplying device which means that it puts out more than it takes in. Early experiments with the tube produced promising results, but the tubes would burn out. Philo and Eric felt that with modern construction technology a sturdy usable energy multiplying tube could be built. This project will definitely be pursued by Borderland Associates as time and money permit.

Philo bought Eric his first notebook to write his work into and thanks to Philo's preliminary insistence BSRF now has over 30 notebooks of Eric's on file. This is some of the most important data available on beneficial technology and pertinent sections will be released in time.

Thanks for being there Philo, you gave us something good to think about, and certainly helped shape our future direction.

LETTERS TO THE EDITOR

RECOLLECTIONS OF ALBERT ABRAMS

"Three weeks ago you began my subscription with the Jan-Feb 87 issue. I about fell out of my chair in browsing your book list, seeing Albert Abrams in the first three titles. They kicked me right back to when I was 16 (1921) in San Francisco, earning high school expenses as one of the last lamplighters as the city's Gaslight Era was coming to its end. On one part of my route near California and Fillmore tiny Japanese five-year-olds in flowered kimonos waited for me in an alley so that as I zig-zagged through, torching their streetlights, they could come romping in my path in shouting sing-song:

'Limpy, limpy lamplighter;
'California flea-biter!
'When the lamps begin to light;
'Then the fleas begin to bite!'

"But, more adventurous was when my earlier 'family doctor' of Bakersfield childhood, Dr. William Stowe Fowler, came calling. He was a radical of his day and the first in California to equip his (Bakersfield) office with one of the earliest X-ray setups. It used an unshielded bulbous 'tube' that glowed bright green as his hand-held zinc-sulfide fluoroscope imaged bones to locate fractures and flesh imbedded bits of hardware in his patients. His X-ray room was a maze of spark-snapping wiring strung from a high-voltage transformer nearby. And he used to let me 'play' with it, mindless of radiation risk that was not yet known.

"Doctor Fowler thought I might enjoy attending with him, as his guest, a strange new medical class, to which he had subscribed, in a nearby residence of my lamp route on Sacramento Street, where a handful of anti-establishment doctors were enrolled to watch Dr. Albert Abrams teach his AMA-protested ELECTRONIC REACTIONS OF ABRAMS diagnosis. From a small black box containing a patient's blood smear, wires extended to metal floor plates on which Abrams' 'reagent' stood bare-footed --- a presumably 'disease-free' young man, stripped to the waist and wearing on his forehead a metal-foil strip connected to the other of the blood sample wires, inter-connected to a dialed rheostat box.

"In hushed silence Abrams' students (and I) watched as Abrams dried the belly of his reagent with talc. He then static-charged a foot-long and slender black lacquered wand on the furry hide of an unfortunate cat. He then began a gentle stroking of the wand up and down his reagent's belly, moving the strokes gradually across his belly. The wand moved smoothly until at one point it seemed to 'grab' the skin surface in jiggling hesitations. As Abrams dialed rheostat settings the 'grabbing' became more pronounced over an area of several inches from his reagent's naval, in distance and direction. Then, with a glance at rheostat numbers he would give his fiat. The patient was suffering from syphilis, pneumococcus infection, a malignant carcinoma or whatever, located in a specified area of the patient. Different 'grab' points on the reagent's belly indicated the patient's specific disease and location.

"A dog's barking outside Abram's home would have him pausing to admonish his students: "Pay no attention. It is only the AMA barking!"

"Before they graduated, Abrams' students became proficient in diagnostic 'wandering', and also in use of the Abrams-invented 'Oscilloclast', a clockworks - ticking sealed box that would feed to a wired patient dial - determined 'electronic impulses' for destruction of a diagnosed disease.

"Doctor Fowler carried back to Bakersfield his E.R.A diagnostic and treatment equipment and skills. As I recall, he built up a quite lively E.R.A. practice, all the while aggressively hounded by the local A.M.A. residency and county medical society. At one time, in his Bakersfield office, Doctor Fowler let me stand as 'reagent', and the clutching of his wand sliding across my own powdered belly banished much of personal skepticism. And when he let me handle the wand, on another reagent, I became more convinced that something strange and new had appeared in medical 'science'.

"Until seeing your booklist I had thought that all concerning Dr. Abrams had vanished, had flown off into the limbo of A.M.A. heresies.

"Cordially, Sholer Bangs, West Covina CA."

Thanks, Scholer, for your excellent recollections. The pioneering work of Dr. Abrams gave birth to the whole 'psychotronics' movement of today. The AMA dogs are still barking but closed minds can never stop grass roots research.

WEATHER ENGINEERING COMMENTS

"It is discomfoting to see Reich's years of experimental research on the orgone ignored, and his theory placed on the same status as the unproven and highly hypothetical 'chemical aether', or the cloudbuster described as a 'particle sink'. In these attempts to second-guess Reich on the actual mechanism of the cloudbuster, I wonder if there is an underlying desire to dismiss or ignore his unsettling prior work on the emotions, body armoring, and genitility. Reich demanded that operators of the cloudbuster be capable of directly seeing and sensing the atmospheric orgone energy, and this cannot be done by individuals who are highly or even moderately armored. In such hands, a cloudbuster is operated blindly, mechanically, and with great risk. Unfortunately, there are a growing number of such armored people who use these instruments merely to impress others, or to play God. The situation is becoming increasingly chaotic.

"In this regard, I am attaching a sheet which is routinely sent to persons who write to the Orgone Biophysical Research Laboratory (of which I am Co-Director) asking about how to build or use a cloudbuster. I hope you will reprint this in your next issue. Anyone who wants more information on this approach to the question can write to me directly, and I'll send them info.

"With best wishes, James DeMeo, PhD
PO Box 161983, Miami FL 33116

Thank you for your letter. Your points are well taken. BSRF has recieved many letters from people asking how to cloudbust and I tell them that it is not a responsible pursuit. I have heard of underground networks of cloudbuster operators and it scares me because all this uncoordinated manipulation of the primary life energy is as dangerous as industrial pollution or nuclear power. I printed Trevor Constable's article in the Jan-Feb 87 issue because Trevor has certainly produced some very important outgrowths of Reich's work. The 'chemical aether' concept seems to be proven by Trevor's advancements and he answers that in COSMIC PULSE. Trevor notifies the government before his operations take place. Reich had no indications of the internal channeling of energy as practiced in Taoism and his theories remain incomplete due to an incomplete Western view of the functioning of the sexual system in the body. I may have been wrong calling the cloudbuster a 'particle sink'. That was my conception at the time of writing. I'm open for comments on this.

Rainworks

A New Approach to Drought

A SPECIAL NOTE TO THOSE INTERESTED IN BUILDING OR TESTING THE REICH CLOUDBUSTER.

A number of letters have been received asking specific questions on the construction and use of the cloudbuster. While this interest and desire may be most rational, developing from a desire to do something about the deadly effects of drought, there are enormous problems which must be dealt with by anyone desiring to build and use a cloudbuster. Untrained use of a cloudbuster poses real and significant dangers to both the operator, and to the community where it is used. While proper use of the apparatus may terminate a drought and bring gentle rains, or even reduce the energy level of a dangerous storm cloud, its improper use has the potential to cause a major disaster. In untrained or unskilled hands, one may actually create or intensify a drought. Or, severe storms of the worst sort may result. It is simply not something one does without significant prior work and training, and the potential for abuse is clearly there.

It is also known that a working cloudbuster will build up a very strong energetic charge around itself, and it is generally unsafe to stand near or handle the device during operations. It is quite possible for the cloudbusting operator, and any nearby casual observers, to be made quite ill from the field effects of the apparatus. Every serious investigator of the cloudbuster takes a number of precautions to avoid such problems, which may potentially be deadly when working under drought conditions. These precautions often include remote-controls for manipulating the tubes, and biophysical methods for removing overcharge from the operator's body after the operations. These precautions also include a program of personal orgone therapy for the operator, in order to soften or remove any emotional armor developed due to the all too common traumas of painful childhood experience. The precaution of therapy for operators is a tradition started by Reich and continued by others after his death. Emotional armoring, which manifests itself as a biophysical rigidity in respiration, movement, and body posture, along with a corresponding incapacity to express or feel deeper emotions, reduces the capacity of the operator to feel or see the atmospheric orgone energy, or to interpret the subjective state, charge, or flow of it during cloudbusting operations.

To summarize, mastery of the cloudbusting technique requires as much time, prior work, and dedication of purpose as is required for other professions of great responsibility, such as piloting a large jet airliner. While the cloudbusting apparatus itself is quite simple, the key to safe and effective operations lies in the training, knowledge, and skill of the operator. The fact that cloudbusting and orgone biophysics have been ignored by most scientists working in traditional research institutions does not change these facts in the least. It is not our intent to sound intimidating about this; we are simply stating the facts as they are. We urge a cautious and responsible approach to this new technology, which can do our planet either great good or harm.

CONTACTS

Contacts is a space where researchers can contact others of like mind and find research sources. Listing is free but we reserve the right to reject goofiness. Be kind and please send a dollar or so when contacting for postage & etc.

* William L. Moore Publications, 4219 W. Olive St., Suite 247, Burbank, CA 91505.

Excellent research source. They are publishing the notebooks of Thomas Townsend Brown which are a treasure trove for those interested in electro-gravity and related fields. Also many books on UFOs and antigravity and government documents on same.

* "I'm doing research on various types of patented and unpatented saucer designs, if you know of anyone doing similar research please have them contact me at the above address. I'd be glad to swap info with interested persons." LeRoy Pea, PEA Research, 116 Vargas Ct., Milpitas, CA 95035

* WOULD YOU BELIEVE, Route 4, Box 156, Marshall, AK 72650. Armand A. Laprade edits this collection of mind-bending articles and interesting information. Material includes reprints of old Amazing Stories articles by Richard Shaver and Vincent Jaddis, info on Flying Saucers, Inner Earth, Mermaids, Witchcraft, and current clips of mysterious happenings. Subscription -\$12/year/four issues; \$3 sample copy.

* INTERNAL ARTS MAGAZINE is a new and very good publication from Paper Lantern Publishing Co, PO Box 1777, Arlington Texas 76004. One article I found quite interesting is "Feng-Shui the Chinese Science of Wind and Water" which covers the oriental view of dowsing for geopathic zones. Further articles cover Internal Martial Arts, Esoteric Philosophies, Biofeedback, Kinesiology, Accupuncture, Meditation, Hypnosis, Fine Arts, etc. \$18.95/year US; Foreign add \$5

* Vaughn M. Greene, 548 Elm Ave, San Bruno CA 94066, has written the book "THE SIX THOUSAND YEAR-OLD SPACE SUIT. This is an analysis of the 6,000 year old Dogu statues found in Japan. Mr. Greene shows over 30 points of similarity between these statues and modern Apollo space suits. \$5.95 + \$1 P&H

* ANDERSON RESEARCH FOUNDATION, 5029 Echo St., Los Angeles, CA 90042. Phone (213) 254-7169. Directed by Dr. Laurence (Andy) Anderson and now at a new address, the ARF is a great meeting place for Southern Californian Borderlanders. Andy was the Regional Director for Borderland Sciences in the late 1950s under Meade Layne and is still going strong. Classes and lectures are held on a regular basis.

* INTEGRATRON PROJECT c/o Donald Lockwood, HC-2 Box 1193, Yucca Valley, CA 92284. Don has been a stalwart supporter of BSRF's intent on finishing the Integratron. Eric Dollard has done some excellent work there and has found that the Dome is directly related to Tesla's Wardencliffe Tower. Eric is also working on his Cosmic Induction theories in the desert. Don can use your financial support to keep the project going. The Dome needs painting, money is needed for equipment and food. Updates will be printed in the Journal.

* BIODYNAMICS is an alternate form of agriculture seeking to re-integrate plants and animals into their natural environment, which is understood to include cosmic influences as well as earthly. Biodynamics was founded by Rudolph Steiner. BIODYNAMICS magazine is \$20 year US/write for overseas rates. PO BOX 550, Kimberton PA 194420

BSRF PROFIT AND LOSS STATEMENT - 1986

SALES/REVENUE	\$33,295	
(Books/Equipment/Donations)		
Less Cost of Goods	(14,499)	
GROSS PROFIT	\$18,796	
MEMBER DUES/SUBSCRIPTIONS	8,668	
TOTAL INCOME/REVENUE	\$27,464	\$27,464

EXPENSES

AUDITING/LEGAL	\$ 750	
ADVERTISING	908	
BANK CHARGES/INTEREST	269	
COMMISSIONS PAID	182	
AMORTIZATION/DEPRECIATION	614	
DONATIONS	3,007	
DUES/SUBSCRIPTIONS	1,024	
LABOR, CAUSAL (Office/Janitorial)	612	
LEASES-Computer/Copier/Auto	4,461	
POSTAGE/UPS, ETC.	3,844	
PRINTING (Journal, mainly)	2,487	
RENT-OFFICE (Not all paid)	9,345	
TAXES	501	
TRAVEL/MOVING/MEETINGS	4,786	
UTILITIES-Electric/Gas/Telephone	3,096	
WAGES-OFFICER (Not paid yet)	36,000	
TOTAL EXPENSES	\$74,235	74,235
NET LOSS - 1986		(46,771)

As you can see BSRF is not on the Fortune 500 list. Membership funds do not cover Journal expenses so we are actively pursuing the publishing of research material to support the Foundation. BSRF is chartered under California law to solicit and accept donations for the furtherance of Research into the Borderlands of Science. As a human being I don't like to ask for donations, but as the Director of BSRF it is my duty to further the work and keep the lamps lit in this dark age of science and religion.

Your donation will help cover BSRF operating expenses and as we grow there are definite research projects we will be funding. Of course we are 100% behind Eric Dollard's groundbreaking research. Other projects BSRF would like to support include: Trevor James Constable's primary energy research; Alison Davidson and myself (Tom Brown) are involved in The Living Sphere Project which includes geometric forms for plant growth enhancement and consciousness expansion; Research for verification of Etheric Energies; and many other projects. With BSRF your dollars produce real work and you can read about it in the Journal of Borderland Research. No claims unless we can produce!



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NEW PUBLICATIONS FROM BSRF

A PRIMER OF HIGHER SPACE - THE FOURTH DIMENSION by Claude Bragdon, to which is added Man the Square - A Higher Parable. The Fourth Dimension of Space is a memory-haunting phrase, often heard, yet little understood. In this volume the author has attempted to explain what is meant by it and to usher the reader into some of those fascinating halls of thought to which it is the door. This book is illustrated and diagrammed and will certainly open new vistas of perception to any who read it. 8-1/2x11, Spiralbound [\$9.00]

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GOETHE'S APPROACH TO COLOR - Extracts from Goethe's Scientific Work, translations by Eleanor C. Merry. Contribution to Optics; Researches Into the Elements of a Theory of Colour; A Theory of Colour; Moral Edict of Colours. Goethe discovered that accepted theories of color were wrong and white light did not contain the colors. This is a most interesting book of discovery! 8-1/2x11, Stapled [\$3.50]

Add \$2 P&H and \$.50 for each additional book. Overseas 25% air / 10% surface (\$3.00 minimum on overseas). CALIFORNIANS MUST ADD 6% STATE SALES TAX!
BSRF Members are entitled to 15% discount off retail price.