

THIS DOCUMENT WAS OBTAINED FROM 'THE MUFON ARCHIVE' IN THE BLACK VAULT ENCYCLOPEDIA PROJECT.
THIS SECTION IS A JOINT EFFORT BETWEEN THE MUTUAL UFO NETWORK (MUFON) AND THE BLACK VAULT
TO OFFER AN UNPRECEDENTED FREE RESOURCE FOR UFO HISTORICAL RESEARCH.

PART OF THE BLACK VAULT INTERNET ARCHIVE, YOU CAN CHECK IT OUT AT:
HTTP://WWW.THEBLACK.VAULT.COM/ENCYCLOPEDIA

ALSO, VISIT MUFON FOR THE LARGEST PRIVATE ORGANIZATION DEDICATED TO THE STUDY OF UFOS
FOR THE BENEFIT OF HUMANITY:

HTTP://WWW.MUFON.COM

MUFON UFO JOURNAL

NUMBER 197

SEPTEMBER 1984

Founded 1967

OFFICIAL PUBLICATION OF



MUTUAL UFO NETWORK, INC. .

\$1.50



SIMULATED LANDING AIDS TRAINEES

MUFON UFO JOURNAL

(USPS 002-970) (ISSN 0270-6822) 103 Oldtowne Rd. Seguin, Texas 78155

> BOB PRATT Editor

DENNIS W. STACY Assistant Editor

THOMAS P. DEULEY Art Director

MILDRED BIESELE Contributing Editor

ANN DRUFFEL Contributing Editor

WALTER H. ANDRUS, JR. International Director

TED BLOECHER
DAVE WEBB
Co-Chairmen,
Humanoid Study Group

PAUL CERNY Promotion/Publicity

MARGE CHRISTENSEN Public Relations

REV. BARRY DOWNING Religion and UFOs

LUCIUS FARISH Books/Periodicals/History

ROSETTA HOLMES Promotion/Publicity

> GREG LONG Staff Writer

SIMONE MENDEZ Staff Artist

TED PHILLIPS
Landing Trace Cases

JOHN F. SCHUESSLER Medical Cases

LEN STRINGFIELD UFO Crash/Retrieval

NORMA E. SHORT
DWIGHT CONNELLY
DENNIS HAUCK
RICHARD H. HALL
Editor/Publishers Emeritus

The MUFON UFO JOURNAL is published by the Mutual UFO Network, Inc., Seguin, Texas. Membership/Subscription rates: \$15.00 per year in the U.S.A.; \$16.00 foreign. Copyright 1984 by the Mutual UFO Network. Second class postage paid at Seguin, Texas. POSTMASTER: Send form 3579 to advise change of address to The MUFON UFO JOURNAL, 103 Oldtowne Rd., Seguin, Texas 78155.

FROM THE EDITOR

With this issue I relinquish the editorship of the MUFON UFO Journal to devote more time to personal affairs. The new editor will be Dennis W. Stacy, who will take over as of the October issue. I wish to thank everyone who has helped me in the past year. If any reader has been unhappy about some of the articles I published, I apologize. I believe everyone has a right to be heard and if his or her views are based on erroneous information or poor reasoning, other readers will show where and why they are wrong. To those who submitted material that was not published, the principal reason has been that there just isn't enough space to publish everything. All in all, I have enjoyed this year. I wish Dennis well and ask readers to continue their support for the Journal to keep it strong and vital.

--Bob Pratt

In this issue

SIMULATED CEZ GIVES TRAINEES EXPERIENCE	. , 3
By Paul Cerny	
RUPPELT RINGS: Effects of low frequency magnetic fields	.5
By Joe Kirk Thomas	
CLOSE ENCOUNTER WITH POSSIBLE MISSING TIME	10
By Walt Andrus	
MERCURY—A POSSIBLE CLUE TO PROPULSION? PART II	12
By Ann Druffel	
DAYLIGHT DISCS SEEN IN PHOENIX	14
SIGHTING OFF COAST OF BRAZIL	
'MASS HYSTERIA' AND MULTIPLE-WITNESS SIGHTINGS, PART II	16
By Michael D. Swords	
DIRECTOR'S MESSAGE	20

The Mutual UFO Network, Inc. is exempt from Federal Income Tax under Section 501(c)(3) of the Internal Revenue Code. MUFON is a publicly supported organization of the type described in Section 509(a)(2). Donors may deduct contributions from their Federal income tax. In addition, bequests, legacies, devises, transfers, or gifts are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of Sections 2055, 2106, and 2522 of the code.

The contents of the MUFON UFO JOURNAL are determined by the editor, and do not necessarily represent the official position of MUFON. Opinions of contributors are their own, and do not necessarily reflect those of the editor, the staff, or MUFON. Articles may be forwarded directly to MUFON. Responses to published articles may be in a Letter to the Editor (up to about 400 words) or in a short article (up to about 2,000 words). Thereafter, the "50% rule" is applied: the article author may reply but will be allowed half the wordage used in the response; the responder may answer the author but will be allowed half the wordage used in the author's reply, etc. All submissions are subject to editing for style, clarity, and conciseness.

Permission is hereby granted to quote from this issue provided not more than 200 words are quoted from any one article, the author of the article is given credit, and the statement "Copyright 1984 by the Mutual UFO Network, 103 Oldtowne Rd., Seguin, Texas" is included.

Simulated CE2 gives trainees experience

By PAUL CERNY Western Regional Director

The San Francisco Bay Area MUFON group meets bi-monthly in a savings and loan office meeting room in Mountain View, which is furnished to us and other organizations at no charge. Usual attendance is about 35 to 40 people, with some coming from more than 100 miles away.

The committee endeavors to plan programs which we feel will be interesting and educational to the group. Normally we show UFO video films and programs, present a speaker or two on various UFO-related demonstrate equipment. cover the latest sightings and research information, and display articles, books and other journalistic items.

In January, we brought to the meeting two different persons who claimed to have been abducted from two widely separated remote areas. This was at the group's request. For our March meeting, at the urging of members, we decided to demonstrate a simulated CE-2 site field investigation to help train members of the group.

Dr. Richard F. Haines, director of the North American UFO Federation, who attends the meetings when possible, offered to conduct the field investigation. Prior to the March



meeting, Dick, as Dr. Haines is known to all of us, went to work on his project. His plans and the site were all unknown to us, with the exception that I furnished the geiger counter and a

radioactive sample of something we called the nuclear thing-a-ma-jig, which was "discarded" by the departing alien UFO.

As it turned out. Dick had selected a very large, empty plot of ground in a secluded rural area near his home. The night before our meeting, he prepared the site. He made ground imprints, burned areas in the dirt and weeds. broke off nearby low tree branches. planted the radioactive device, and arranged various residue and other markings, all as simulated evidence.

At the meeting the next day, which was a Sunday, Dick selected a group of four other members from the audience

to act as the investigation team. The following team duties were assigned: a sample collector and data recorder, a video photographer, a still photographer, and a "radiation monitoring" expert. (continued on next page)



(Cerny, continued)

Dick even arranged for one member, Linda Abell, to come forth at the meeting as a "witness" to describe the UFO landing she saw the night before from her simulated bedroom window. Dick then explained the procedures and plans for investigating "the incident." The "witness," the team members and their equipment, and all the rest of us piled into a car-pool caravan and headed for the site about a mile away.

At the site, Dick was quick to point out, as he indicated, the general vicinity of the "landing" spot and said we should first rope off the area to keep us onlookers from possibly trampling on or destroying "the evidence."

He let the team of investigators discover the imprints, burned patches and other obvious traces. Ron Lakis of KPIX-TV in San Francisco brought along his video equipment and proceeded to tape and (sound) record the whole session with help from an assistant. Another team member covered the investigation sequences with a movie camera as well.

The area was marked off by laying down a heavy, stringed north-south,



east-west grid over the markings. Samples of the soil, residue and burned areas were removed by one team member and carefully placed into labelled sample bottles and bags. Plastic gloves were used.

Compass deviation and geiger counter readings were taken over the area until the radioactive device was located and its readings were recorded. The device was then carefully removed and placed in a clean plastic box. the broken tree branches were carefully photographed and plaster casts were made of the imprints.

During all that went on, Dick explained to the group what the investigators were doing and why. This was all tape and video recorded and notes were taken down constantly on a clipboard by another team member. One of the team members took a series of slide photos, as the team's still photographer.

The time spent at the site, carefully going over every detail and recording it all, took almost two hours. Everyone seemed quite fascinated by the whole event and we eventually dismantled what the team had laid out and went back to the meeting room.

To conclude the interesting afternoon, Dick filled us in with some preliminary results, his remarks, comments and suggestions.

Isabel Davis, veteran researcher and writer

Isabel Davis died in her sleep at the Georgetown University Hospital on June 19-20, 1984, after a brief illness. She received her bachelor's degree from Barnard College (Columbia University). Along with Ted Bloecher and Lex Mebane, she was one of the founding members of Civilian Saucer Intelligence (CSI), in New York in 1954.

Her publication credits include coeditor and writer with Ted Bloecher and Lex Mebane of the CSI Newsletter, from 1956 through 1959; co-editor of the American editions of Aime Michel's books, The Truth About Flying Saucers and Flying Saucers and the Straight-Line Mystery (1956 and 1958 respectively); co-author of the UFO series, "Shapes in the Sky," published in Fantastic Universe bimonthly, between 1957 and 1959; and co-author with Ted Bloecher of Close Encounters at Kelly and Others of 1955.



In 1955, Isabel personally investigated the Kelly, Kentucky, humanoid case at the site and wrote a detailed report, which only a handful of private researchers had seen until it was published in 1978 by the Center for UFO Studies.

In 1966 when sightings and political pressures brought the UFO subject to a head, NICAP asked her to come to Washington, D.C., to help, where she played an active role into the 1970's.

She was noted for her penetrating critiques of "Contactee" stories and lucid writings on questions of extraterrestrial visitations, skeptical attitudes and other subjects. Isabel retired from the American Psychological Association after ten years as a writer and researcher.

Many MUFON members had an opportunity to meet and visit with Isabel when she attended the MUFON 1979 UFO Symposium in San Francisco and at the 1981 symposium at M.I.T. in Cambridge, Massachusetts. She was a board member of the Fund for UFO Research at the time of her death. She will be particularly missed as a colleague by Ted Bloecher and Richard H. Hall, with whom she has been associated for nearly 30 years. Isabel had left her mark in ufological circles and in the hearts of her many friends.

RUPPELT RINGS

--effects of low frequency magnetic fields

By JOE KIRK THOMAS

Copyright © 1983 by Joe Kirk Thomas

Close Encounters of the Second Kind provide a challenge for the physical scientist. These cases involve the interaction of a UFO with its environment. The effects are distinctly physical and the cases are relatively free of media contamination and remarkably consistent for UFO data.

CE II effects fall into three catagories: Electromagnetic Interference cases, which include compass deflection and automotive ignition system failure; Physical Traces, which include pad print and surface burn marks; and Physiological Effects, which include the percipients' sensations of heat, numbness, or electric shock.

The task of the analyst is to explain as many of these effects as possible with the fewest possible mechanisms. Within the first category the evidence is accumulating that several effects are due to low frequency magnetic fields. This article contains an analysis of a classic case, the results of which indicate that an effect previously listed as a physical trace has, in fact, an electromagnetic origin.

The case in question is that of the Florida Scoutmaster. The version used is that reported by E.J. Ruppelt¹ and as told by the scoutmaster in his written statement to Blue Book.²

The sighting occurred on the evening of August 19, 1952, near West Palm Beach, Florida. The scoutmaster, D.D. Desvergers, was returning from a Boy Scout meeting with three scouts which he had volunteered to take home. His attention was drawn to several lights that had descended into the bush and pines to his left. His initial concern was that he had witnessed an airplane crash, so he turned around and drove back to where he estimated the lights had landed.

He left the car after instructing the now frightened scouts to go for help if he failed to return within 10 minutes. Armed with a machete and two flashlights, he encountered a palmetto thicket about 30 yards off the road, and tried unsuccessfully to find an easy path either around or through it. He then started wading through waist-high undergrowth, becoming faintly aware of a peculiar odor and slight rise in temperature. After about 30 yards, he emerged from the thicket into an open area.

As he entered the clearing, the odor and heat became almost unbearable, "oppressively moist, making it hard to breath." After a few more paces, he suddenly felt as though he was being watched, and decided to try to orient himself with the North Star.

He then realized that most of the sky was being blanked out by a large dark shape above him. As he slowly backed out from under the object, the air became cooler and fresher. Shining his light at its edge, he found a gray circular craft, slightly concave on the bottom and with a "turret" on top. Then he heard a sound, somewhat like a hatch closing, and a red "ball of fire" emerged from the turret. The scoutmaster shielded his face with his arms just as it engulfed him, and then fainted.

The scouts had seen the scoutmaster struck by the red ball, and had run for help. About a half hour later, a deputy arrived on the scene with the three boys. The scoutmaster was just reviving.

Captian Edward J. Ruppelt, at the time in charge of the USAF Project Blue Book, learned of the scoutmaster incident early the next morning. He flew to Florida with a staff member and interviewed both the scoutmaster and the scouts. He personally inspected the encounter site, taking photographs, soil and grass samples.

As Desvergers had sustained mild first-degree burns, along with singed hair, on his face and arms, he was asked to submit to a physcial examination, which he did. His cap had been burned in several places and it was sent along with the machete, soil and grass samples to ATIC (Air Technical Intelligence Command, Wright Patterson AFB, Dayton, Ohio) for laboratory evaluation. Ruppelt returned to ATIC convinced that Desvergers was telling the truth, and that the case was bonafide.

But within two days the entire case soured. Desvergers had given a press conference in which he alleged that he had been told by "high brass" in Washington not to discuss the sighting. Furthermore, he had hired a press agent! And background investigation on the scoutmaster was turning up disturbing facts. Desvergers had been court martialed for going AWOL, and had served a jail term for auto theft.

The physician who examined him had said that the superficial burns he suffered could very easily have been made with a cigarette lighter. The burns on the cap didn't extend into the folds, which meant that the cap was flattened when burned, possibly with a laundry iron. Ruppelt had written the entire affair off as a hoax when he received a call from the laboratory.

The grass samples taken from the site had seemed normal enough, but when the dirt had been shaken away, the roots were found to be charred! The lab had been able to duplicate this effect only by placing grass and sod in a pan and heating from underneath with a bunsen burner. Charring of the roots had occurred at 300°F.

This discovery added a new dimension to the case. It was clear that the grass had somehow been heated from below. The Blue Book staff had considered the possibility that hot springs or swamp fires had been active in the area, but such was not the case. If the sighting had been a hoax, it would have had to have been an expensive

and sophisticated one indeed.

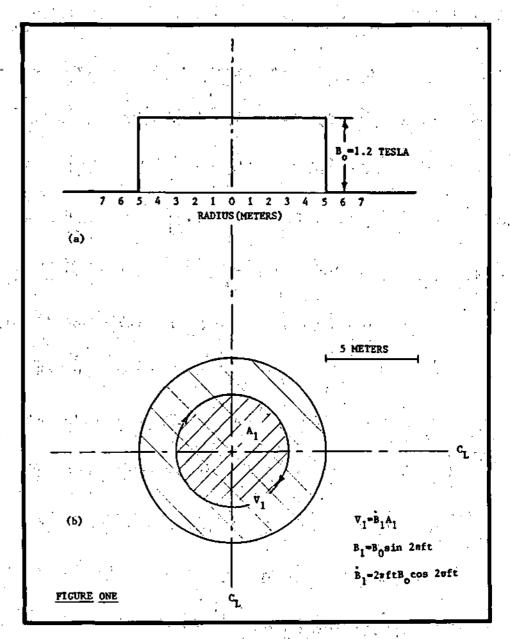
What mechanism would char the grass roots while leaving the grass unscathed? Ruppelt found the answer in an old electrical engineering text book — induction heating. When a conductor is subjected to an alternating magnetic field, electromotive forces are induced which cause "eddy" currents to flow.

Induction heating was and is a common industrial process. In the scoutmaster case, the conductor in question was damp sand. If a powerful generator of alternating magnetic fields had hovered a few feet about the ground, the subsurface soil might have been heated sufficiently to char grass roots running through it.

Ruppelt speculated whether such a field could be associated with UFO propulsion. Unfortunately, Ruppelt never quantified his theory — he never generated equations to model his theory or made calculations to characterize the field that would be necessary to produce the observed effects. Nevertheless, his qualitative insight was quite good as it was made in an era when UFOs were not generally known to have electromagnetic effects associated with them.

In recent years, several investigators have labored at characterizing the radiation field about a UFO in terms of either microwaves or low frequency magnetic fields. The author favors the latter as the most likely mechanism behind such things as auto ignition system failure and anomalous compass behavior in CE II "symptoms" indicate cases. The magnetic fields of the order of 1 Tesla (10,000 gauss) "in the vicinity" of UFOs, with frequencies in the subkilohertz range. The following analysis models subsurface induction heating with an eve to determining if the above field could produce the effects reported by the Florida Scoutmaster.

The first task is to model the magnetic field. To begin with, the author will use a somewhat unphysical field geometry from which one can nevertheless gain useful information. The magnetic field, B, is assumed to be uniform within a circle of 10 meters



diameter, an often reported disc size, and zero beyond, as shown in Figure One (a).

The magnetic field is assumed to vary as $B_0 \sin 2\pi ft$, where B_0 is the peak field amplitude and f is the frequency. The induced voltage³ about any loop of radius r is simply BA, where B is the time rate of change of the magnetic field and A is the area within the loop, as shown in Figure One (b). The average voltage around the loop can be shown to be:

$$V = \frac{2\pi f B_0 \pi r^2}{\sqrt{2}}$$

The electrical resistance in a ring of soil of circumference $2 \pi r$ and cross section S is:

$$R = \underbrace{\begin{array}{cccc} \rho & 2 & \pi & r \\ \hline & S & \\ \end{array}}_{4}$$

where ρ is the resistivity of the soil⁴. The power is dissipated as heat when a voltage is dropped across a resistance⁵ is V²/R, therefore:

$$P = \frac{(\pi r)^3 f^2 Bo^2 S}{o}$$

The heat input into the soil ring is simply

the power times the heating time, t, times the factor .24 (which converts joules to the more familiar calories). Since the ring volume is $2\pi r \cdot S$, the heat input to the soil per unit volume is simply:

$$Q(m^{-3}) = .12(\pi f B_0 r)^2 t$$
 $r < 5$

From MIL - HDBK - 4196, a military handbook covering electrical grounding, the author finds that moist topsoil loam has a resistivity P of approximately 1 ohm meter. The author will assume the magnetic field amplitude Bo to be 1.2 Tesla, and its frequency f to be 100 hertz. As the scoutmaster episode lasted for perhaps ten minutes, the heating time will be taken to be 600 seconds. Substituting these values into the above equation. and dividing by 106 to convert m3 to cm³, one can compute the heat input per cm³ for all radii between 0 and 5 meters, inclusive, to be:

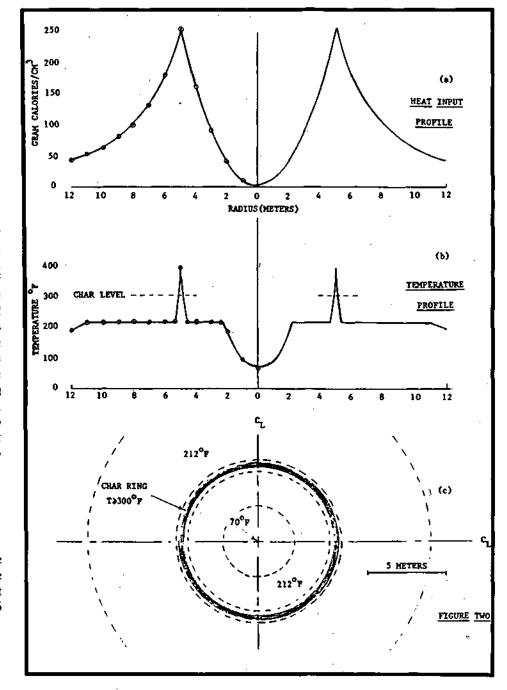
$$Q(cm^{-3}) = 10.23 r^2$$

At radii greater than 5 meters, the enclosed flux, BA, and, therefore, the induced voltage, BA, remains constant as the magnetic field is 0 beyond 5 meters. The average voltage then is:

$$V = \frac{2 \pi f B_0 \pi r_{\text{max}}^2}{\sqrt{2}}$$

where $\boldsymbol{r}_{\mbox{\scriptsize max}}$ is the maximum extent of the magnetic field, in this case 5 meters. The resistance of any ring beyond rmax however, continues to increase with increasing radius. Therefore, for r >rmax

$$P = \frac{v^2}{R} = \frac{\pi^3 r_{\text{max}}^4 f^2 B_0^2 s}{\rho r}$$
 Q (cm⁻³) = 6396/r², r > 5.



Multiplying the above equation by time t and the coefficient .24, and dividing by the volume of the ring, one obtains

$$Q(m^{-3}) = \frac{.12 (\pi f B_0)^2 r_{max}^4 t}{\rho r^2}$$

Substituting the above values and dividing by 10%, one obtains:

$$Q (cm^{-3}) = 6396/r^2, r > 5$$

Thus, the heat input per cm³ increases as r² up to 5 meters, at which time it decreases as 1/r2. The heat input profile for this case is shown in Figure Two (a).

The temperature rise of the top soil can be computed from its total heat input with ease, providing that one keeps track of changes in the water content of the soil. For the case that there has been sufficient heating to cause charring and burning, it can be shown that there are three distinct regions in the temperature profile.

In the first, the soil is moist, and for (continued on next page)

any given heat input the rise in temperature is

$$\Delta T_1 = \frac{Q_1 (cm^{-3})}{m_1 (cm^{-3}) C_1}$$

where m₁(cm⁻³) is the mass of the soil per cm³ and c₁ is the damp soil's specific heat⁷. When the temperature reaches the boiling point of water, however, the temperature remains constant as the heat goes into affecting a phase change in the water. The amount of heat required to convert the moisture in the soil to steam is

$$\hat{Q}_2(cm^{-3}) = m_{H_20}(cm^{-3}) L_{H_20}$$

where LH₂₀ is the latent heat of water, and mH₂₀ (cm⁻³) is the mass of water in the cm⁻³ of soil. When all moisture has been driven from the soil, the temperature again rises as

$$\Delta T_3 = \frac{Q_3(cm^{-3})}{m_3(cm^{-3}) C_3}$$

where m_3 is the mass of dry soil per cm⁻³, and c_3 is the specific heat of dry soil. The total temperature rise is then:

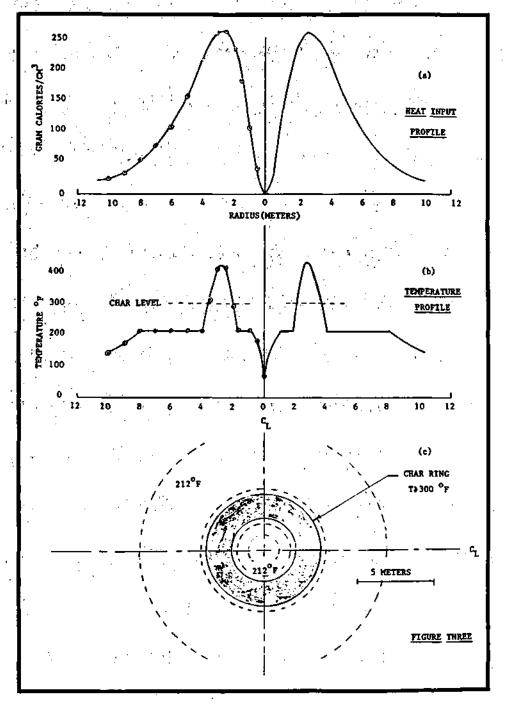
$$\Delta T = \Delta T_1 + \Delta T_2 = \Delta T_3$$

where ΔT_2 =0. The actual temperature of the soil after heating is:

$$T = T_i + \Delta T$$

where T_i is the initial temperature of the soil.

The volume specific heat of the soil before and after dehydration can be easily calculated. A cubic centimeter of wet sand weighs 2.08 grams. When dry, the soil weighs 1.76 grams. The heat capacity of the water is then the product of the mass of the water (.31 grams) and water's specific heat (1cal/gram), or .31. The heat capacity of the dry soil is then the product of the



mass of the soil (1.76 grams) and sand's specific heat (.2 calories per gram), or .352. Thus, the heat capacity per cm³ (or volume specific heat) is .31+ .352 = .662 calories per cm³.

Once the volume specific heats for both moist and dry soil are known, the temperature of a cubic centimeter of top soil at any radius can be computed from the heat input profile. Figure Two (b) is the temperature profile so calculated, with the temperature expressed in °F.

At r=0, immediately under the center of the disc, the soil temperature

is the ambient 70 degrees. The temperature rises rapidly until it reaches 212°F at a radius just slightly over 2 meters. The temperature now remains constant as the heat input goes into vaporizing water. At a little over 4 meters, the soil has become dehydrated and the temperature rises again, only more sharply than before since the volume specific heat of the soil is now much less due to the loss of water.

The peak temperature occurs at 5

meters, where T = $394^{\circ}F$. Beyond 5 meters, the temperature drops rapidly since the heat input is falling as $^{1}/r^{2}$. Another isothermal region, at $212^{\circ}F$, stretches from about 5.5 to 11 meters, followed by a decline in the soil temperature which asymptotically approaches $70^{\circ}F$. Figure Two (c) shows what the rings would look like if viewed from above.

Within the context of the Scoutmaster case; what does this theory explain?

Certainly it explains the percipient's sensations of heat. While still in the palmetto thicket, Desvergers was already sensing a rise in temperature. Once in the clearing, and apparently under the object, the heat had not only become unbearable, but "oppressively moist, making it difficult to breathe." One would expect this to be the case if subsurface water was being driven off as steam. One would also expect that there would be considerable outgassing of decaying organic matter in the soil, giving rise to the odor. And, of course, in a region of peak heat input, grass roots would char.

The theory also explains how Desvergers was also able to avoid severe burns himself. Viewed from above, the human body's cross sectional area simply isn't large enough to allow a significant rise in body temperature.

The attentive reader will recall that the above analysis was made with the somewhat unphysical assumption that a uniform alternating magnetic field existed in a circle of 5 meters radius, but was zero beyond that. Although a useful fiction in that it allowed the author to derive certain characteristics of induction heating, it is important to see if the same approximate results occur with a more realistic magnetic field configuration.

The author has made calculations for the case that the source is a magnetic dipole. This is the field generated by a current flowing in a loop of wire. The field shape is the same as that of a disc magnet, or, for that matter, the earth. Unfortunately, the mathematics required to calculate even

the heat input as a function of radius is rather extensive if one is looking for a solution in closed form. The author solved the problem numerically by creating an algorithm called RUHEAT for the HP11 Programmable Pocket Calculator.

A detailed discussion of the program RUHEAT is beyond the scope of this article. A brief discussion of its strategy, however, may be helpful. The program assumes that a vertically oriented dipole is some distance h above a conductive ground. The ground is divided into a large series of concentric rings, the center coinciding with the dipole axis. The code then calculates the distance of points on the rings from the dipole center, and from this calculates the magnetic field at that point due to the dipole. Since the currents induced in the soil are azimuthal, only the vertical component of the magnetic field contributes to heating. This is computed for each ring. The induced voltage along each ring is computed by adding the product of B and Area of the ring to the similar products of all preceeding rings. The resistance of the ring is computed from its radius, and from this the heat input per cm3 is calculated for the soil in that ring. With the heat profile thus generated, the temperature profile is easily found.

From Desverger's written statement to Blue Book, a reasonable height, h, was taken to be 4 meters. Since 1981, the author has favored a value of 125 x 10⁷ amp meter ² as the most likely magnetic moment based on compass and metal sign deflection data. This value was then inputed to RUHEAT, with the frequency set to 100 hz. as before.

Figure Three (a) shows the heat input profile for a magnetic dipole. Figure Three (b) is the temperature profile, and Three (c) are the rings as viewed from above. The basic features are the same as for our first case, but it is obvious that the char ring is wider and occurs much closer to the center. It should be pointed out, however, that the equation used to calculate the dipole's magnetic field is for the case that the radius of the loop creating the field is much, much less than the distance to points on the ground. As the

dipole area becomes larger, the ring geometry would become more like that in Figure Two (c).

The significance of the above analysis goes far beyond the Florida Scoutmaster case. If one were to increase the strength of the magnetic fields, field frequency, or hover time, or reduce the height, the heat input into the ground would increase rapidly. One would then expect temperatures high enough to cause not only root charring but burned surface vegetation. As it turns out, this is a common physical trace in close encounters where the UFO was found hovering⁸ 9.

Such cases fit a genral pattern: either a circular region either burned or dehydrated, or a ring, whose overall diameter can be 30 feet or more, but whose thickness is only 1 to 3 feet. The most common diameters are between 20 and 30 feet. The similarity between these reported effects and Figures Two (c) and Three (c) is interesting indeed.

Furthermore, the rings usually persist for weeks, months, or years, and the interior of the ring, and sometimes the entire circle, remains barren for a season or two. This is to be expected. After all, much of the top soil has been sterilized, and within the charring the heating has been sufficient to carbonize organic matter.

What information can be gleaned from a carefully examined ring case? There is the possibility of determining the dipole area. The fact that most rings are circular tends to indicate that the field is symmetrical about a vertical axis. By measuring the moisture content, resistivity, and volume specific heat of the soil, it should be possible, with a well documented case, to determine the product of magnetic field frequency and amplitude, fB_O.

And what was the final dispostion of the Florida Scoutmaster's case?

Ruppelt admits difficulty in writing the official report. Against the scoutmaster, there was disconcerting information about his personal history and the way he subsequently tried to cash in on his experience. On the positive side was the charred roots. Ruppelt finally decided to classify it as a hoax, calling it "the best hoax in UFO

CLOSE ENCOUNTER WITH POSSIBLE MISSING TIME

By WALT ANDRUS

Carolyn Greene, 35, and her son Timothy, 7, were returning to their home in the Cedar Creek Lake area near Caney City, Texas, on the evening of January 26, 1984, after visiting Mrs. Greene's uncle in Ennis, Texas. About 8:15 PM, while driving east in her 1979 Mercury Zephyr on FM 85, she noticed an unusual amount of static on her automobile radio when she was six miles west of Seven Points.

Shortly thereafter, the headlights started flashing off and on, making it very difficult for her to see the road. She decided to pull off to the side of the road as a safety precaution. Before she could, however, all of the lights were extinguished and the motor failed. Even though she had her foot on the brake, the automobile continued forward. She let go of the steering wheel when she thought she had stopped.

"Some force literally took control of the steering wheel and the car was driving itself," she stated.

When the autombile stopped moving, she knew she was in a shallow ditch alongside the highway. A glowing white light then illuminated the entire car, both inside and out as they sat in the ditch. "My hair was standing on end and my son was frightened," she told the investigator.

Timothy asked: "Mommy, what is it?"



Carolyn Greene and her 1979 Mercury

Her reply was: "I don't know."
While sitting in the ditch, she tried to start her car, but got no response.
The starter was simply dead. The

The starter was simply dead. The headlights were off and the radio was dead.

Carolyn is unable to explain what happened to the bright white light that lit up the car because at this point both believe they blacked out. Just prior to the time that the car went into the ditch, Timothy told his mother "something is pulling on me — like a magnet."

When they regained their senses, the white light had disappeared, but they could see several red flashing lights above their car. Tim said he saw three whereas Carolyn could only see one. Timothy said that a single red light then joined the other three up in the sky. They were flashing or pulsating at the same rate as the automobile's headlights had previously done.

After the red lights moved away, Mrs. Greene apparently was able to start the car, but she cannot remember doing so, it was such a frightening experience. She does vaguely remember driving out of the ditch back on to the highway. Her next recollection was driving east at 75 miles per hour trying to get away from whatever it was that forced them off the road.

Carolyn said she was so frightened she could not think clearly. She said

(continued on next page)

Thomas, Continued

history." He could never figure out how Desvergers, or anyone else, could have perpetrated it.

FOOTNOTES

1. E.J. Ruppelt, The Report on Unidentified Flying Objects, (Garden City, New York: Doubleday and Company, 1956), p. 176-186.

2. See "Florida Scoutmaster's Encounter." Entry in The Encyclopedia of UFOs. Edited by Ronald Story and Richard Greenwell (Garden City, New-York: Doubleday and Company, 1980,) pp 128-131.

3. For an elementary discussion of induced emf,

see Halliday and Resnik, Physics for Students of Science and Engineering, (New York: John Wiley and Sons, Inc., 1960) pp. 778-806.

4. Ibid., pp 678-696.

5. Ibid, pp 697-721.

6. MIL - HDBK - 419, Grounding, Bonding, and Shielding, Vol. 1, pp 1-7 to 1-11.

7. A very elementary discussion of specific heat can be found in F. Miller, College Physics (New York: Harcourt, Brace, & World, 1959) pp 214-210

8. J. Allen Hynek, The UFO Experience (Chicago: Regnery, 1972), p. 129.

 Ted R. Phillips, Jr., "Physical traces of UFOs" entry in The Encyclopedia Of UFOs. Edited by Ronald Story and Richard Greenwell (Garden City: Doubleday & Company, 1980), pp 256-266.

Greene, Continued

"My face was warm or hot, like the heater was turned on in the car." (The heater was not on.)

As they sped down the highway to get away from whatever was chasing them, they again noted red flashing lights behind them. Their first thought was that the flying saucer was chasing them again. Timothy turned to look back to determine what it was and realized it was probably a police car.

Carolyn pulled off to the side of the road and stopped. The policeman asked her: "Do you know why you were stopped?" She replied: "Yes, I was speeding." The police officer went back to his vehicle to write the ticket.

She told him what had happened, but "I don't think he believed me...just thought I was trying to get out of a ticket." Her response later was: "I will be happy to pay the ticket — all that matters to me is that people believe I'm telling the truth. Both me and my son will be glad to take a polygraph test."

Mrs. Greene says she doesn't know how long she and her son were in the ditch. "It may have been a matter of seconds or minutes...! just don't know," she said. "All I am certain of is when I regained my senses, I found myself speeding down the highway."

When interviewed by Scott Elliott, the managing editor of the Athens (Texas) Daily Review, she said:

"I don't have any idea of what it (the force) was, but I think people should know about it. I know folks are going to say I'm nuts. Nothing like this has ever happened to me before and I never expected it to.

"I'm a law-abiding citizen. I wasn't drinking, and I don't fool around with drugs. I know what I saw, and my little boy knows what he saw. Maybe I could dismiss it (the force) as an airplane if my little boy hadn't been there with me to experience the whole thing, too. But his account of what happened is the same as mine, so I can't dismiss it. I think it was a UFO of some kind."

When MUFON investigated this unusual experience, it appeared that it could have been a "missing time" episode, since neither Mrs. Greene nor Timothy can remember how long they sat in the ditch. They have very little



TIMOTHY GREENE

recollection of what transpired between the time that the car was illuminated by the bright white glowing light and when they found themselves speeding down the highway. Carolyn cannot remember starting the car, but can vaguely remember driving up the incline to the highway.

While reconstructing the series of events to determine if there was a time lapse, the investigator was able to determine the following: (1) There is no clock on the 1979 Mercury Zephyr dashboard. (2) Carolyn was wearing a watch, but couldn't see it in the darkness. (3) She checked her watch when they arrived home and it was 8:45 PM. (4) The police officer stopped them for only 5 or 6 minutes to write the ticket. (5) She made no mental note of the time they left Ennis, Texas, which is 22 miles from where the incident took place. (6) The distance from the incident to her residence is 23 miles. (7) Carolyn knew it was getting dark because this is what prompted them to start for home; The Old Farmers Almanac indicates the sun would have set at 5:02 PM CST for the area. (8) It would have been totally dark by 5:45 PM to 6 PM, since Carolyn advised that the weather was clear and the stars were visible later. (9) They made no other stops except for the speeding ticket. (10) She said the normal driving time between her uncle's home and their residence is approximately 11/2 hours when driving at 50 mph. (11) The total distance is 45 miles; therefore Carolyn is a very conservative driver. (13) If she left at 6 PM and arrived home at 8:45 PM, this would have been an elapsed time of 2 hours and 45 minutes; a time loss of approximately 1

hour and 15 minutes. (12) The police officer issued the ticket at 8:15 PM.

We will come back to the possible "missing time" aspect after trying to determine if a UFO was present or if one could have been responsible for the incident.

At no time did Carolyn or Timothy report seeing a craftlike object that might be identified as a UFO. The automobile was illuminated with a bright white glowing light.

Both saw one flashing red light near their car when they regained their senses. Timothy said he saw the one red light ascend and join three other flashing red lights that were hovering at a higher altitude. He was able to watch these while his mother was speeding down the highway.

Timothy described a force pulling upon his body "like a magnet." Carolyn said her hair stood straight up and she felt like something was trying to raise her out of her seat in an upward direction. Neither people had seat belts fastened at the time.

Now let us analyze the mechanics of the 1979 Mercury Zephyr to determine if the engine failure, flashing headlamps, and static on the radio, historically known symptoms of UFO close encounters, had any natural or mundane explanations.

The first obvious explanation for Carolyn being unable to stop the car by applying normal pressure to the brake pedal and her inability to control the customary steering of the car may be attributed to the fact that when the engine failed to run, both the power brakes and power steering became very difficult to operate.

As to the headlights flashing off and on, she has had to take her car to several different mechanics because this condition has been present intermittently since the incident. The light switch on the dashboard has been replaced. Mechanics have replaced the wiring from the switch to the headlights. The automatic highlight dimmer control was disconnected then removed to eliminate this as the source of the problem.

On May 11, 1984, the lights were still "acting up." Did a UFO cause this

Mercury--a possible clue to UFO propulsion?

By ANN DRUFFEL

Part II

We continue this discussion of the metal mercury and its possible relationship with propulsion systems of some UFOs. In Part I, I referred to a close encounter witness interviewed by my husband Charles and myself in 1965. Because of need to guard her anonymity, she will be referred to as M.C. Her case is known to several Southland researchers because of her vivid descriptions of the UFO in which she was allegedly given a ride interstate in the Pacific Southwest. Her descriptions and sketches of the propulsion system of the alleged extraterrestrial craft were interesting enough to draw the attention of a group of scientists and engineers in the Southern California area.1

This group's repeated attempts to gain useful information from M.C. eventually proved unsuccessful. Some members felt that M.C.'s story might be based on reality, but that the information gained during their subsequent interviews could not be employed in a logical manner in building a duplication of the craft described.²

One bit of information given by this

Greene, Continued

damage to her car, or is it simply an electrical problem that has baffled the mechanics to date?

This still does not explain why the engine failed and excess static was noted on the radio. It is the responsibility of the investigator to eliminate mundane reasons for symptoms associated with UFO reports as an essential ingredient of the investigation. Ninety percent of the raw UFO sighting reports from the "manon-the street" have mundane explanations after a thorough study has been completed. However the 10 percent residue that defy earthly explanations become the actual

witness continued to intrigue me, because it involved a specific reference to mercury. To summarize M.C.'s statement, the alleged occupants spoke to her in broken, accented English. According to her, their craft "traveled on a vacuum while it was inside the earth's atmosphere." The ship was two-storied, and the lower section contained a number of double "drums," each going around at great speed. Inside these drums was "a liquid sort of thing," and the drums themselves were like soft plastic.

M.C. did not know what the liquid was, but was told "when it hit the earth's atmosphere it chilled [and changed] the nuclei of the atoms in the air temporarily, so that all activity of the atmosphere momentarily stopped and a vacuum was created around that part of the ship's hull in the direction of travel." She specified that the earth's atmosphere pushed the ship through the air because "nature abhors a vacuum" and since the ship kept forming a vacuum, the atmosphere kept pushing against it.

There was no propulsion unit as such inside the ship, as we would ordinarily regard "propulsion," at least

unidentified flying objects. This particular case remains open as of this date (May 23, 1984).

Since there is apparently a time loss element, regressive hypnosis becomes a possible tool or technique to reconstruct this loss of memory. Both Mrs. Greene and Timothy are willing to undergo regressive hypnosis if it is performed by a certified professional under controlled conditions. MUFON has several qualified professionals in northeast Texas that may be utilized for this purpose; however no commitments or appointments have been made to date. A follow-up article will be published if and when these sessions are conducted.

while the craft was inside earth's atmosphere. When the ship went outside earth's atmosphere, according to M.C., it used another type of power system of a type not explained by the UFO's occupants.

M.C. stated that the outside of the craft spun while in motion through the air, although the six pie-shaped chambers inside did not spin.

The sets of double drums in the bottom section of the ship spun around so fast "they looked like they were standing still," according to M.C. They were shaped like oil drums and were of different sizes. A piece of equipment "like a tremendous electronic brain" transferred instructions from the occupants in the control cabin to the drums in the bottom of the ship.

The bottom section had two sets of large double-drums on each side, balanced by their position to each other. Along the top of each drum was a quantity of "pure white material that looked like wires but could have been light." These wires were in a certain pattern.

In addition to the wires on top of the drums, there were features interspersed among them that looked like nails, but were soft and "jelly-like." These spots, according to M.C., looked like "mercury." The spots of mercury were also in definite patterns, and were at each site "wires" intersected, so that the effect was like "a schematic of some sort."

M.C. was apparently trying to describe in ordinary terms an experience with machinery that was totally outside her concepts. "Between these spots," she insisted, "were these wires. They would go to one of these spots of mercury and did something to it, and then it would pick up something, and then continue on to the next spot, picking up something more."

M.C.'s impression was that the

Druffel, Continued

motion among the "wires" and mercury-like "spots" probably made the drum go around, "because it made it heavy on one end or something. That is what it looked like." According to her description, the drums rotated in unison, one of each pair going clockwise, its companion rotating counterclockwise. They spun around on their horizontal axes, not end over end.

M.C. stated that she was shown the drums in both the quiescent and active states so that she could get an impression of how they worked. In the quiet mode, the spots and wires could be observed clearly.

The "signals" to the spots of mercury, via the "wires," was sent down from the control board in the top section of the craft: The occupants explained to M.C. that when the signal was given to the spots of mercury, "this stuff was drawn down inside the sets of double drums, and there was a compartment on the inside of the drum where this stuff was released. It comes up again, hits another spot of mercury, picks up more energy, etc. until the drums are rotating faster and faster."

She went on to explain that this "agent," affected by the energy gathered by the spots of mercury on the top of the drums, meanwhile was going out through numerous tubes which had outlets on the outside of the ship. According to M.C.'s understanding, the agent chilled the air temporarily before coming back down into the drums. The agent went from the large drums into smaller sets of rotating drums before it was released (chilled) out onto the surface of the ship. M.C. could not define what this "agent" was, but it is entirely possible that it, also, being a "liquid," was mercury.

The action of the "energy" on the wires, on the spots of mercury, on the agent inside the drums and (temporarily) on the outside of the ship was described by M.C. as "sort of a pulsation."

M.C.'s description of the way in which the "ship" was propelled was the most specific I have come across in 27 years of field investigation and, indeed, to my knowledge, in UFO literature. No

judgment can be made at this point in time as to whether or not she was describing a real event, but her mention of *mercury* in relation to the alleged propulsion of a UFO makes it proper to be used in context with this article.

Since the value of the case could not be proved, however, it lay in files titled "Mercury: Theory of UFO Propulsion." Then, quite serendipitously, I found a reference to two-pool mercury-sealed relays which handled high currents at high voltage.³

The mercury-displacement-type relay, according to this article, could provide millions of silent operations. It could be applied in many situations where the surrounding atmosphere was corrosive, dirty, inflammable, or otherwise hazardous.

The principle of operation involved a coil surrounding a central tube which was not energized so that the plunger at the center was held suspended in a raised position. But when the ferromagnetic plunger pulled down the ceramic cup holding a small pool of mercury into a larger pool of mercury at the bottom, the two mercury pools interconnected electrically.

This might or might not be associated with Patrick Thrush's reference to "MIT's incomplete mercury pool theory", but the fact that "two pools of mercury," according to Patrick Thrush, had something to do with the electromagnetic propulsion system of an observed UFO, and then in scientific literature, a two-pool mercury device is described which handles high voltage currents safely and silently, the coincidence could not be passed by UFO do operate silently, for the most part, and seem to have some connection with electromagnetism.

In regard to M.C.'s description of "something that looked like wires but seemed also to look like pure white light," it might be appropriate to point out that Alan Holt, an aerospace scientist and UFO researcher, has suggested how an advanced spacecraft might be built which might effectively tunnel through space and time. In the same way that a nuclear particle escapes energy walls, a spacecraft, could theoretically be transported to a distant space-time point. His theory

referred to the generation of megagauss magnetic fields by laser beams.⁴ Although any possible relationship is extremely tenuous, the question must be asked. Were M.C.'s alleged "wires that looked like light" actually something like laser beams, transferring energy to a mercury-based propulsion system?

As the years pass, more references to mercury appear in UFO literature. In 1977 at the MUFON Symposium in Scottsdale, Arizona, Dr. William Hassel, an applied physicist, described: a 1920 experiment by Professor Q. Majorana in which a lead sphere was suspended with a mercury shield. Majorana found that the weight of the sphere diminished by a small amount when shrouded in mercury. Six years later he tried a larger shield of lead and received even better results. He had demonstrated, in other words, the absorption of gravitational force by an intervening medium which, in one instance, was mercurv.5

Einstein's theory of gravitation makes no provision for such shielding of gravity effects, according to Hassel. Of course, shields of both mercury and lead, in these experiments, produced unexplainable diminishment of gravity effects, but Hassel's paper is intriguing due to the fact that mercury was again being mentioned in UFO literature.

In summary, whether the future will bring added references to mercury in UFO research is not known, but the UFO cases cited here specifically mentioned mercury as being involved in UFO propulsion. And the scientific references to mercury collected here refer to that liquid metal's relationship to gravitational effects, the silent operation of a mechanism involving both mercury and high electrical voltage, and its easy (and admittedly mysterious) transformation on an atomic level in at least one experiment. Could all these facts and reported UFO cases have possible relationship to one another?

REFERENCES & FOOTNOTES PART II

1. Witness' name and details of location not used

DAYLIGHT DISCS SEEN IN PHOENIX

Many investigators and researchers became interested in UFOs because of a sighting or experience they had. Among them is MUFON's international director, Walt Andrus, who was with his wife and son when he spotted a group of objects at 1 PM on August 15, 1948. Here is his report:

While vacationing in Phoenix, Arizona, we were walking on the south side of an east-west street and had stopped to observe a Stearman Trainer aeroplane towing a glider over the city. My son, who was 5 years of age at the time, pointed up in the sky toward the northeast and said, "Look daddy, silver balloons."

Four round dull silver objects were floating slowly in the northeast at an angle of 45 degrees above the horizon moving straight west. Three were flying in a geometric formation, while the fourth was lower and considerably behind the first three. They were flying in a formation opposite to that of fighter aircraft, where one protects the other directly below it.

The lead craft was the highest and the next two followed at a lower level equally spaced behind to form a line, while the fourth craft was spaced out behind and lower than the formation.

It was a perfectly clear day, without a cloud in the sky. Therefore, I was unable to estimate their altitude in relation to a particular cloud formation

Druffel, Continued

for reasons of need for anonymity. Case in NICAP archives and Druffel files.

- 2. Names withheld for reasons of professional confidentiality.
- 3. "Two-pool Mercury Sealed Relays Handle High Currents at High Voltage", SPECTRUM, January 1972, p. 89
- 4. Holt, Alan C., "Field Resongance 'Propulsion'," Abstract (Revision A), privately distributed.
- 5. Hassel, William F., "Future Physics and Antigravity", 1977 MUFON UFO SYMPOSIUM PROCEEDINGS, Seguin, TX, pp. 60-69

height. At that time I was the station manager for Mid-Continent Airlines (now merged with Braniff International) in Quincy, Illinois, and held a U.S. Weather Bureau Observers Certificate, and a private pilot's license.

Since we had no way of determining their altitude and estimate their diameter, their individual size could be described as the size of a dress shirt button held at arms length.

My son, who saw them first, has

such poor eyes that he had to start wearing corrective lenses two years later. Everyone on our side of the street stopped to watch these objects as we followed them slowly across the sky.

Moving directly west, the objects arrived at a point nearly straight north of us when the lead object disappeared in the clear sky. When the second object arrived at the same point is also



Sketch by Simone Mendez

SIGHTING OFF COAST OF BRAZIL

disappeared as did each of the following

Since "flying saucers" has been reported the year before in the newspapers, we became seriously interested, because we felt that we were observing such a phenomena at that moment. We reasoned that if they continued straight west at the same angle to the horizon they might return to view just as easy as they had disappeared.

(As a weather observer, I daily released balloons to measure the height of clouds above the Quincy Airport, but our balloons, of course, never broke flying parallel to the earth).

The wind was blowing from the west on this date, which is the prevailing direction in Phoenix, Arizona. (If they had been balloons they were flying directly against the wind, or the winds aloft were blowing at 180 degrees opposite direction, which is possible but very unusual.)

We continued to move our eyes across the sky at about the same rate of speed as the four objects had been traveling when they pulled their disappearing act. Between northnorthwest and northwest the first three objects still flying in formation reappeared just as rapidly as they previously exited. The fourth object was never seen again.

We continued to watch them until they became faint in the western sky. The total time of the observation exceeded ten minutes; therefore, the craft were either flying relatively slow or they were immense in size and flying very high.

They were perfectly round in shape when observed, but had to be very thin in thickness, because they simply rolled over on edge giving a profile view with the effect of disappearing in a clear sky. If they were somewhat translucent when viewed from their edges, this would also cause them to be difficult to observe. We could them with the naked eye during the period stated when they seemed to disappear.

There was no sound detected (only the street noises) and no jet vapor trail or light was emitted from the craft.

The following is reprinted from the November-December 1983 (Volume 4, No. 3) issue of UFO Research Australia Newsletter. It is the translation (by UFORAN correspondent Tiberius A. Topor in Rumania) of Gerhard Cordier's article which appeared in NEUER WEG (Bucharest) on November 13, 1982, based on an interview with Captain Stefan Freitag, reporter Edmund Hofer and certified engineer Gustav Ruckert.

Captain Stefan Freitag, commander of the cargo ship "Bocsa," of the Rumanian Merchant Marine, related the following interesting event, which occurred two days after leaving Tubarao, Brazil just under the equator.

This incident took place on September 17 and, in the words of Captain Freitag "it was about 2100 hours. The officer on watch had just determined our position and checked our coordinates through a navigation satellite. The data coincided. We were at 11°37' southern latitude and 33°28' western longitude, that is, about the edge of the 200 sea-mile limit of the Brazilian territorial waters.

"As it was just after sunset, there was the possibility of seeing a satellite passing across the sky. I just wanted to mention that possibility because an officer, who had just left the deck, shouted, 'I see a satellite'. I rushed out, but the shiny point he observed showed laterally green light. It could thus have been an airplane flying from South America to Africa.

"I was returning to the commander's deck when the man shouted again: 'Look over there, one more satellite!' The phenomenon taking place belongs to the long list of unknown cases in which UFOs were seen, that is, the strictly scientific cases of unidentified flying objects."

As Captain Freitag left the commander's deck, to look at the "satellite" from the other side, he saw a

full-moon-like "something" that was pale colored. Beside it, a "star" was shining brightly and became brighter, more brilliant and greater in size until it was the same magnitude as the first object, that is, full-moon size. Then, it also grew paler.

The two objects disappeared and left behind a shiny cloud. In the middle of the third "moon," which presently appeared like the other two, an explosion was observed. An orange light radiated from the core of the phenomenon and, in a matter of minutes, covered the whole of the "moon" with a ring, like that of Saturn, which shone around the phenomenon which was turning pale.

Captain Freitag called the crew and 14 men came on deck. The Captain shot a few sequences while the physician and boatswain took some pictures.

In the meantime, a fourth "moon" appeared and went through the same phases as the third had done. It had a vertical crown of rays.

Suddenly, the "star" became rapidly larger — it looked as if a heavenly body was falling upon the ship at fantastic speed. The phenomenon's size increased to that of a giant sun. The crew flew in a panicked crush towards the door. The dog, called Lord, howled and barked.

Captain Freitag reached the side of the ship where the phenomena was occurring; it seemed to have halted and now shone in all the rainbow colors and was surrounded by a flickering shine. Then it grew pale and disappeared, leaving behind a phosphorescent cloud. Such was also the case with the fifth phenomenon.

"I must stress that the whole process took place in absolute silence and, also, that no heatwaves were felt. Only the Geiger Counter which I, alas, brought too late, showed an intensified

'Mass Hysteria' & Multiple-Witness sightings

By MICHAEL D. SWORDS, Ph.D.

Now, the "environments" which breed MPIs or mass psychosenic illness: we can talk about two distinct environments which play a role, the physical and the psychological.

1. Physical environment: most cases of MPI occur in enclosed spaces such as workplaces or schools, although more diffuse cases involving communities are known. For the common cases the environment often contains some of these characteristics: boredom or monotony, work stress, poor communications with "bosses," low status of individuals, noise pollution, poor lighting, and crowding. Now all this might seem far removed from Ufology, and in a way it is, but the physical environment is simply an irritant for a more basic internal problem which may have Ufology

Brazil, Continued

radiation inside the ship and on all the crew members. I counted five rads outside, six rads on the 14 crewmen who witnessed the phenomena and on the ship's outboard I counted seven rads".

After the phenomena disappeared, the shiny clouds that remained could be seen for almost half an hour. Around the ship a glow could be seen like that of a full-moon night, but there was no moon in the sky. The clouds shone with a greenish-blue light.

A day later, on September 18, the crew of a British shp, coming from South Africa and heading for Bermuda, saw, at about the same time, and a few degrees nearer the equator, seven phenomenon of the same type. Captain David Johanson of the "Tenchbank" communicated with Captain Freitag, who had asked the Coast Guard for an explanation but had received no answer.

This is the second of three articles on the subject of "mass hysteria" and its relation to multiple-witness UFO sightings.



implications. The characteristics above are felt to be added stressors which push a person with a more fundamental internal problem over the edge. They are environments which lead to attention to internal body or mental stress, i.e. to "stewing in your own juices." Some individuals will crack under this added strain because of their personal problems, others will never give way to MPI symptoms. So it's the internal personal problems in which we are interested.

2. Internal or pyschological environment: the key phrase in this area is "chronic stress." The affected individuals are laboring under great strain, tension, anxiety, "neuroticism," or whatever you want to call it. This stems from some endemic problem in their lives. Most cited of these problems are role or status incongruities ("status inconsistency"), and family or economic pressures. We can all relate to family and economic pressure, but what is "status inconsistency?" An example of a common "role" inconsistency occurs when a woman with children is working. She may create her own chronic internal pressure, often subconsciously, as she "denies" her traditional role as homestaving mother. Donald Warren's article of "status inconsistency" describes several other forms of such incongruities involving income educational attainment. and "ethnicity." Simple examples would be a "White Protestant Ph.D. with very low income" or a

"Black millionaire with a grade school education." Most of Warren's ideas revolve around the "economic" variable being out-of-line. Two other common factors unite victims of MPIs. One, they are "deniers" of their conflicts; they won't admit that they have problems. Two, they are not hypochondriacs; they don't usually adopt sick roles. These two indicate that the victims keep problems bound up within them.

So, the picture we get is: 1. a group of people afflicted with serious internal and environmental stressors; 2. placed in a monotonous or stressful environment; 3. hearing of a "trigger event" containing details of symptomatic behaviors; 4. beginning to express such behaviors without realizing why. Also, the trigger event must be mysterious (experts are baffled) and fear-producing.



Now, directly on to Ufology...

Does this picture make any sense?



Apparently some UFO commentators think it does. Mark Phine is his chapter in the "Condon Report" remarks quite favorably on the possibility of "mass hysteria" explaining UFO phenomena. 10 He mentions anxieties, money problems, imminent threats, and feelings of personal

Swords, Continued

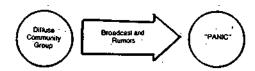
inadequacy as relevant stressors, and cites the June Bug case and Welles' War of the Worlds broadcast panic for support. The "attitude" of his piece is highly skeptical toward UFOs and the language used indicates poor objectivity bordering on flippancy. But "pro-UFO" writers also feel MPI may be relevant.

Ronald Westrum in UFO Phenomena and the Behavioral Scientist admits that "UFO" is a transmittable concept, and recognizes the need for research on crowd effects in UFO witness cases. "He also mentions the Welles' broadcast. Robert Hall in UFOs: A Scientific Debate speaks of systems and "contagion of belief" and states:

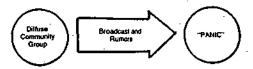
"some effort has been made to liken UFO reports to these cases of hysterical contagion. It appears quite clear that hysterical contagion contributes some cases to the massive number of reports, but there are many difficulties in trying to argue that the hard-core cases can be explained in this way." 12

Dr. Hall mentions the usual June Bug and Welles cases, plus the Seattle windshield pitting "mania" and the Mad Gasser of Mattoon as MPI incidents similar to UFO cases.

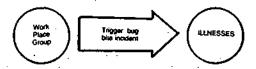
Well, folks, although disagreeing with experts is a risky occupation, it is not at all clear to this author that MPI contributes any cases of UFO reports. Let's back up this presumption by initially examining the example cases cited by the authors above. First, Welles' Broadcast.



Second, the Seattle Incident



Third, the June Bug Incident



Fourth, the Mattoon Gasser



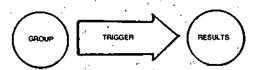
The first two cases are not true MPIs at all.13,14 In both the Welles and Seattle incidents the resultant "syndrome" included nothing but enhanced fear levels due to rumors and misinformation. Illness did not result. Hallucination did not result. In short, none of the characteristics of MPI resulted except agitation due to fear. The affected people showed a very low level of "craziness" compared to victims of MPI. No one saw or reported Martian extraterrestrials or Soviet nuclear attackers (the Seattle incident involved fear of fallout from Soviet weapons testing).

This sort of diffuse panic situation falls under the modern psychiatric heading of "anxiety attacks." The people involved are not psychotic, nor even borderline psychotic. They are "normal" frightened people. For this reason, the level of "craziness' is low. These people are still largely in touch with reality. They continue to test reality as it stumbles across their path, and, thereby, they do not hallucinate the objects of their fears, nor do they succumb to hysteria symptoms. They are frightened. They believe, But they do not add unreal "experiences" to their beliefs. If we find any hint of such unrealities added onto such a situation, we need to look beyond simple diffuse crowd anxiety to explain it.

Now for the "true" MPIs: the June Bug and Mattoon incidents. Both of these cases fit the patterns of "mass hysteria": a first case, an acceleration of symptoms, and a "burn out" of activity in about 10 days. Although fear was present (fear of infection or of being gassed), it was not the end of the phenomenon, as in the first two cases,

but rather produced "illnesses" in the victims. The June Bug case occurred within a closed work environment. 15 The Mattoon gasser worked within a diffuse community. 16 The Mattoon case seems most like UFO experiences. In reality, neither are particularly analogous. Here's why.

Let's pretend for a moment that we have no problems relating the slow "10day" time period with UFO cases; let's imagine that there is an explosive (almost all-at-once) type of MPI which could shorten the time scale to fit multiple witness or "all-around-town" type cases. This is something which we probably should allow for since certain non-western cultural rituals seem to be able to bring on such "explosive" group-hysteria phenomena in matters of minutes. However, such explosions depend on powerful traditions and, therefore, suggestibility in the communities involved.17 But there are much more fundamental problems than the time scale in relating MPIs to UFOs. In our pattern



what we see in Ufology is "Results," i.e. the UFO reports. As we reflect on the "results" of MPI, we see that something rather important is missing...visual hallucinations.

Of all the cases of MPI closely studied by psychologists, only one contains even a hint of visual hallucination (a Malayasian case wherein a few women in the large hysterical group felt a dark man was coming to strangle them). 18 Even in this single case, only the most violently hysterical claimed to have this vision.

No other cases of visual hallucination exist in the professionally studied cases. No one saw the alleged Mattoon Gasser; no one spotted the offending "June Bug." If MPIs were to be at the root of community or multiwitness UFO reports, the total number of such reports might well be zero. At least it is legitimate to say (my apologies to Robert Hall), it appears

quite likely that hysterical contagion contributes no cases to the massive number of reports.

A second significant difference exists between MPI and UFO reports, regarding the results. This is how those "results" are perceived both by society and by the future "victims." In MPIs society must perceive the resultant behavior as deviant and needing treatment of some kind. The potential "victim" must perceive the behavior as being rewarded in a way which gives them release or respite from their chronic stress. It's at least questionable whether either of these two characteristics applies very well to the behavior called "reporting a UFO."

If Gallup polls mean anything, such a report is long past being considered deviant and requiring treatment by society at large (even if psychiatrists themselves tend to assume such). It's difficult to assess whether UFO percipients might feel that reporting a UFO would relieve chronic stress in their lives in some way. It would be interesting to explore why anyone would predict stress relief via a UFO experience, especially among relatively normal, non-psychotic community members.

There is one marginal aspect of UFO phenomena which may be influenced by MPI: Cults. Some of the behaviors and enhancement of the emotional content of beliefs in so-called millenarian (salvation or messianic-like) cults has been shown to paralled the MPI pattern. Most ufologists, however, rate these cults as an unfortunate side-effect of the UFO phenomenon, and they play little role in the scientific job of puzzling out the basis of the mass of data.

A few other thoughts on MPI and UFOs: Could the whole country-wide UFO phenomenon be an ultra-diffuse case of MPI? Theorists feel that such diffuse MPIs can occur so long as the area involved has sufficient communications power to spread the "rumors" and the details of the appropriate "deviant" or abnormal behavior. A small scale example of this was a flurry of pseudopoliomelitis in the U.S. in the 1950's. 19

Well, no matter what the scale, the objections to applying MPIs to multi-witness and community-wide "flaps" still stand — especially the matter of visual hallucinations. If we waive the problem of visual hallucination (which there are very good reasons not for doing), then the MPI pattern gives us some hints as to what to look for in UFO witnesses:

- 1. Chronic stress in their lives
- Possibly "status inconsistency" of life roles
- 3. Possibly "status inconsistency" of economics
- 4. Fear of something associated with the event
- 5. Personal characteristics of conflict denial and non-complaints
- 6. Non-psychotic, but increase in neuroticism
- 7. Possibly above average extroversion
- 8. Inclusion of odor hallucination in "trigger" event

The first five have been mentioned above. A word about the others, MPI victims do not show psychosis, but show greater neuroticism as measured by the Eysenck Personality Inventory.20 Extroversion has been noted in slight increase using the same test. The "Hysteria Scale" of the Minnesota Multiphasic Personality Inventory does not show an increase in MPI victims (indicating less "craziness" than in individual hysteria syndromes).21 The odor hallucination, or perhaps odor hypersensitivity, is an intriguing aspect of MPI.22 It occurred in more than half of the closely studied cases (most obviously in the "gas" of the Mattoon gasser).

Another word, though, on visual hallucinations: this author admits that we need a good, detailed presentation on current thinking about visual hallucinations and how they may relate to Ufology (a presentation on "fullscales" elaborate hallucinations, that is, ones with richness of detail). Lacking this, here are a few words: the human brain is a "sight-brain"; sight is our reality tester. Our brains are powerfully cued into sight, and when visual hallucinations of an elaborate sort occur, they are signs of something rather seriously going awry. An example of this effect: even in serious

psychosis such as schizophrenia the typical hallucinations are of the "lesser" senses (usually auditory) and are much more rarely visual. Visual hallucination indicates a very severe schizophrenia case usually.

Also, hallucinations occur when the "excitement" level of the neurons in the brain are boosted very high beyond normal or depressed very low beneath it. That is, either much too great a sensory bombardment or much too little a sensory input will cause the mind to inappropriately piece together a vision of external reality (i.e. hallucinate visually). Drugs may easily accomplish this. Extreme environments of stimulation or deprivation may as well. Certain natural or cultivated "altered states of consciousness" (such as the dream state) seem to mimic visual hallucinations; and certain organic brain problems create these problems as well. The common ingredients in these cases seem to be a very abnormal activity level of certain brain hormones (esp. dopamine, nor-epinephrine, and serotonin), and a consequent abnormal activity of key brain structures (esp. the brain's "filters", the thalamus).

The point of this is, the means of producing elaborate visual hallucinations of the "close encounter" sort involve brain mechanisms and chemistry of an extreme and abnormal sort when compared to normal awake consciousness. This is, doubtless, why we don't have them in large groups of people as in MPIs. It is also why the phenomenon of MPI probably has nothing to do with UFO reports.

To Be Continued

REFERENCES

- 8. Kerchkoff, A.C. and K.W. Bach. The June Bug: A study of hysterical contagion. N.Y. 1968, p. 25
- 9. Warren Op. cit., also a 1975 report to the International Sociological Association, Geneva by same author, and reported by Westrum, Ronald M. in Haines (see below).
 10. Rhine, Mark. "Psychological Aspects of UFO Reports", in Condon, E.U., op. cit., pp. 590-597.
 11. Westrum, Ronald M. "Witnesses of UFOs and Other Anomalies." Haines, Richard, op.cit.,
- pp. 89-112. 12. Hall, Robert L. "Sociological Perspectives on

iz. I lan, nover i z. Goctologica i e speciliori

Director Message, Continued

qualified person to become the State Public Relations Director. These people will work in conjunction with Marge Christensen, the MUFON Director of Public Relations, to distribute News Releases to news media personnel in their respective states in addition to their local news releases.

Marge will compose and word the news releases whereby they may be reproduced and mailed in the format received. Obviously, each will consist of significant national news that will be appropos to all states.

The news releases will normally be mailed to each state director with the monthly MUFON Newsletter to conserve postage. Please forward the names, addresses, and telephone numbers of each State Public Relation Director to Walt Andrus in Seguin, Texas.

Swords, Continued

UFO Reports", pp. 213-223 (quote p. 217) in Sagan and Page, op.cit. Dr. Hall reported similarly to the U.S. House of Representatives Committee on Science and Astronautics Symposium on Unidentified Flying Objects. Document number PB-179-541. U.S. Government Printing Office. 1968, pp. 100-112. 13. Cantril, H. The Invasion from Mars. Princeton, 1940.

14. Medalia, N.Z. and O.N. Larsen. "Diffusion and Belief in a Collective Delusion: The seattle Windshield Pitting Epidemic." Am. Soc. Rev. 23:180-186, 1958,

15. Kerchkoff and Bach, op.cit.

16. Johnson, Donald M. "The Phantom Anesthetist of Mattoon" J. of Abnormal and Social Psychology 40:175-186. 1945

17. Sirois, François. "Perspectives on epidemic hysteria", in Colligan et al, op.cit., pp. 217-236. 18. Phoon, W.H. "Outbreaks of Mass Hysteria at Workplaces in Singapore." in Colligan et al, op.cit., pp. 21-31.

19. McEvedy, C.P. and A.W. Beard. "Concept of Benigh Myalgic Encephalomyelitis." British Medical Journal 1:11-15. 1970.

20. Colligan, Michael J. and L. R. Murphy. "A Review of Mass Psychogenic Illness in Work Settings." in Colligan et.al, op.cit., pp. 33-52.

21. Temoshak, Lydia and C.C. Attkisson. "Epidemiology of Hysterical Phenomena" in Horowitz, op.cit., pp. 143-222 (esp. pp.186-7). 22. Colligan and Murphy., op.cit., pp. 36-40.

Every member may acheive a twoway benefit by writing to your U.S. Congressman and requesting a copy of the revised and updated booklet titled The UFO Enigma by Marcia S. Smith and revised by George D. Havas dated June 20, 1983.

Composed by the Science Policy Research Division, Congressional Research Service, The Library of Congress, it is Report No. 83-205 SPR (143 pages).

By taking advantage of this free 81/2 - x - 11 publication, you will not only have a fine addition for your personal library, but the impact of everyone writing to their congressman will be advising them that the UFO phenomenon is very much alive and of public interest.

Even though Prentice-Hall recognized the heavy pre-publication demand for their new book Clear Intent by Larry Fawcett and Barry J. Greenwood, their first printing was only 6,000 paperbacks and 1,500 hardback editions. Book stores were immediately sold out as people clamored to obtain copies of this potential best seller.

We were fortunate that the Walden Book Store in San Antonio was able to purchase and have 100 hardback copies available at the MUFON 1984 UFO Symposium for Barry to autograph. As announced in the May-June 1984 edition of the Journal, MUFON purchased 100 paperback copies that are available for \$8.95 plus \$1.50 for postage and handling.

The cost of the hardback edition is \$17.95 at book stores. MUFON does not plan to stock hardback copies due to the large difference in price.

It has also been suggested that members should send a copy to their U.S. Representative or Senator. Since most book stores are sold out of Clear Intent, you can obtain your copy by writing to MUFON.

Dan R. Wright, State Director for Michigan, has composed a draft copy of a potential examination for Field Investigator Trainees desiring to be upgraded.

The exam consists of 100



DONALD R. SCHMITT Wisconsin State Director

questions: 64 multiple choice, 27 true/false, and nine to fill in the blank. The subjects covered include astronomy. Earth's atmosphere and weather, electromagnetism, radar, radio, sound, human sight, light and color, photography, shapes and measurements, meteors and satellites, psychology, IFOs and UFOs.

It is intended as a so-called "take home" exam for which the individual would be permitted to call upon any resource. It is predicated on the idea that proper investigation of aerial phenomena requires a working knowledge of numerous science and technological fields. Preliminary copies have been submitted to all State Directors for their study and recommendations.

This is a positive step toward securing professional field investigators. It is expected that an experience factor and required reading could supplement this exam, before a person could qualify as a Field Investigator.

The July-August issue of the Journal gave the readers a brief statement about the contents of each speakers paper. To obtain a copy of each speech presented, order your personal copy of the MUFON 1984 UFO Symposium Proceedings (184 pages) for \$10.00 plus \$1.50 for postage and handling in U.S. Funds from MUFON, 103 Oldtowne Road, Seguin, Texas 78155. For our members in foreign countries it is recommended that all purchases be made with an International Postal Money Order or by a check drawn upon a United States Bank or branch thereof.

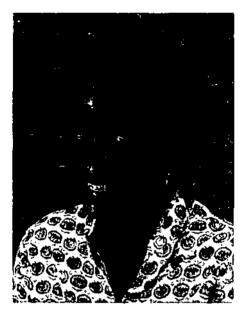
DIRECTOR'S MESSAGE by Walt Andrus

Starting with the October 1984 issue of the Journal, Dennis Stacy, the present Assistant Editor, will assume the responsibilities of Editor, relieving Bob Pratt. A few months ago, Bob asked your Director to secure a new editor so he could devote more of his personal time to writing. Bob became the editor with the October 1983 issue, replacing Richard H. Hall. Walt Andrus will become the Assistant Editor, having served as the interim editor on several occasions.

When one considers that the nation of Brazil is practically the same geographic size as the United States, our representation in this Portuguesespeaking country must be expanded. Cynthia Newby Luce has agreed to become the Sectional Representative for Eastern Brazil. Cynthia, a U.S. citizen residing in Brazil, has an M.A. in experimental psychology and is interested in the multi-dimensional and paranormal aspects of the UFO phenomenon. Cynthia attended the recent MUFON UFO Symposium in San Antonio, where she earned the respect of those she met.

Jorge Arias (Gosalvez), living in Oruro, Bolivia, is our new-Representative for Bolivia. He is a member of numerous UFO organizations in Brazil, Argentina, France and Portugal. Jorge was recommended by J. Antonio Huneeus (New York City) after Antonio's recent visit to South America.

Wang Qi-Sheng, an engineer in Fangsham, Beijing, the People's Republic of China, volunteered his expertise as a Research Specialist in Propulsion Systems. He has submitted a scholarly paper titled "Space-time Peculiarities of the Multi-dimensional World and Their Position in the World of Matter." After screening Mr. Qi-Sheng's impressive paper, James M.McCampbell, Director for Research, has recommended that copies be submitted to other consul-



CYNTHIA NEWBY-LUCE Director, Eastern Brazil

tants versed in the physics and mathematics of the five dimensional complex space-time field.

Kay R. McFarland, a retired college library director residing in Port Orange, Florida, has joined MUFON as a Research Specialist in Library Science. Kay has an M.A. in library science and has completed her course work for a doctorate.

Kenneth McLean, State Director for Wyoming, has selected Marven G. Norman of Cheyenne as the Assistant State Director and State Section Director for Laramie County. Paul C. Cerny has approved the appointment of Roy R. Yates of Fresno, California, to become the State Section Director for Fresno and Madera Counties. Roy has a B.S. in education, and was recommended by Marvin E. Taylor, Assistant State Director for California.

William P. "Bill" Heinzerling, an innkeeper in Waitsfield, Vermont, with a B.A. in geology, will be the State Section Director for Washington County. Bill attended the symposium in San Antonio and was impressed with the caliber of the speaking program and the participants.

Edward J. Planz, State Director for Alabama, has proudly announced the assignment of the following new State Section Directors: EdO. Brown. formerly the Director of Public Relations for the University of Alabama in Tuscaloosa and now retired, is the State Section Director for the counties of Tuscaloosa, Greene, Pickens, Favette and Lamar, Mr. Brown has been a member of MUFON for ten years and active on the MUFON Amateur Radio Net with the call letters N4JUB. Michael R. Flora holds a B.S. in engineering physics and is employed by NASA-MSFC in Huntsville, Alabama, as an aerospace technologist. Michael is responsible for the counties of Limestone, Madison and Jackson. John R. Garbutt, Jr., whose UFO interest goes back to 1949, when he was employed by the Air Force as a civilian, is the State Section Director for Elmore County. John, now retired, is also a ham radio operator K4AKC.

On July 22, 1984, The Birmingham News (Alabama) published a feature story titled "UFO's—Hiding in space or gone for good?" datelined Tuscaloosa by Mike Bolton with illustrations by Ray Brown. Occupying two-thirds of the front page of Section B, the article was an interview with Edward J. Planz. State Director for Alabama. wherein MUFON was mentioned on numerous occasions. Basically, the story was an update on the status of newsworthy UFO sightings in the southern states since 1947. The story was picked up on the wire services and since then Ed Planz and Ed Brown were interviewed by the radio station CHUM in Montreal and a brief report was aired on WOAI in San Antonio.

Since public relations and education ranks as one of our top priorities, each State Director is being asked to select a competent and

(continued on page 19)