

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85716, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

TUCSON, ARIZONA — JANUARY-FEBRUARY, 1970

NEW PHYSICAL EVIDENCE CASE

The Cowichan Occupant Case

The November-December APRO Bulletin carried details of a press report from the January 5 issue of the *Victoria, B.C. Times* which related the story of Miss Doreen Kendall's New Year's Day sighting of an unconventional aerial object.

Garry Jopko, APRO's Field Investigator at Naden, British Columbia, was notified immediately and complete details have been obtained and forwarded to Headquarters. Instead of correcting the few errors in the news article, we will present the entire case again. The report includes complete written statements from the principal witnesses, Miss Kendall and Mrs. Frieda Wilson of Cowichan Station, B.C.

Miss Kendall, a registered nurse, lives at Nanaimo and commutes to work at the Cowichan District Hospital. At midnight on New Year's Eve, both women began the midnight to eight a.m. shift on the second floor East Wing of the hospital. At 5 a.m. they went into a four-bed ward to begin morning care. Mrs. Wilson did the patient whose bed was by the door and Miss Kendall did the patient in the next bed which was located next to the window.

At this point, Miss Kendall pulled the drapes open as is frequently done at that time of the morning. She stood looking out and Mrs. Wilson continued with her duties. After a few moments Miss Kendall called to Mrs. Wilson in an urgent tone. The latter went to the window and stood staring in wonder at a strange object just outside. She said, "What on earth is that?", to which Miss Kendall replied: "I guess it's a flying saucer." The couple then dashed quickly to the Nurse's Station down the hall and told what they had seen. They were not believed at first but eventually two nurses followed shortly by a third came into the ward where they watched the lights of the disc-shaped craft. It was some distance away by then but the lights

(See Occupant — Page Three)

Cigar-Disk Observed Over California

Almost at press time, APRO has received a preliminary report of a UFO observation in the Los Angeles area. Reporting to APRO were the two main witnesses, Dr. and Mrs. Howard Blank who described their observation of 6 p.m., February 23, 1970.

"Blank" is a pseudonym as the Doctor does not wish to be identified.

The witnesses were arriving home from Dr. Blank's office. (Dr. Blank is a physician and surgeon) when Mrs. Blank observed a cigar-shaped object through the car window, with blinking lights on the side. At first she thought it was the local *Good Year* dirigible but both witnesses became convinced during the four to five minute observation that this was not the case. They estimated that the object was about 500 feet above the ground and about 500 feet away, traveling slowly, about 20 m.p.h. It was soundless. Dr. Blank immediately produced a quarter coin and held it at arm's length. The object was approximately one-quarter larger than the coin.

After getting out of the car, neither of the witnesses saw the blinking lights but Dr. Blank observed about 12 of these later while his wife ran into the house to phone the Orange County Airport, which was closed. Local police, when contacted, suggested they may have been observing flares. The object was moving from the northwest to the southeast and the witnesses believe that the object was very close to *Disneyland*. As it moved along, Dr. Blank described how it "fell" 100 feet twice, following a pendulum motion and constantly wobbling in a strange manner, like a leaf from a tree. Both times that it descended 100 feet, it emitted a flow of what appeared to be a misty substance that gradually dispersed and disappeared. Also, a protusion was observed on the underside. Dr. Blank says he got the distinct impression that the "cigar" had changed shape, that it was no longer torpedo-shaped but more like two saucers stuck together, the classic

(See Cigar — Page Three)

On the 28th of February 1970 Mr. and Mrs. Lorenzen drove to the vicinity of Phoenix, Arizona to investigate a case possibly involving UFO residue. The primary information had been furnished by a friend who had talked to the principal in the case.

Mr. S. (who for the present will remain anonymous) is a mining prospector living in a hilly area near Phoenix. His exact location will not be identified at this time for various reasons. His story is as follows:

On a very warm summer night "four or five years ago" (the year has tentatively been established as 1965) Mr. S. was lying in bed in his cabin on his property. He was suddenly startled by a strange sound (strange to that area) which he can only describe as similar to the sound made by an electrical transformer "only more high-pitched." Then the light came, he said, bathing the inside of his cabin like brilliant sunlight. It was so bright, he said, that it hurt his eyes and when he closed them he could still see light. "I lay there petrified with fear — it scared the hell out of me," he told the Lorenzens.

After approximately two minutes the light went out and the humming subsided, sounding as though the source had traveled north.

Mr. S., his courage returning, got out of bed and went outside. He scanned the countryside and the sky but saw nothing which could have caused the light and the strange sound. So he went back to bed.

The next morning when Mr. S. arose, the strange events of the night before came back to mind and he wondered what the (to him) airborne object could have been so he made a systematic search of the immediate area which surrounded the cabin. He said he had no idea of what he might find, but decided to look for anything amiss.

A thorough search of the grounds yielded only one thing: a tiny spindle-shaped bright yellow object with a

(See Evidence — Page Three)

THE A.P.R.O. BULLETIN

Published by

THE AERIAL PHENOMENA
RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road
Tucson, Arizona 85716

Phone: 602-793-1825 and 602-326-0059

Copyright 1970

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

A.P.R.O. STAFF

International Director L. J. Lorenzen
Assistant Director Richard Greenwell
Secretary Coral Lorenzen

CONSULTANTS

Aeronautics Capt. William B. Nash, B.S.E.
Astronautics Rayford R. Sanders, M.S.M.E.
Astronautics John F. Schuessler, B.S.M.E.
Astronomy Leo Vern Standeford, Ph.D.
Astrophysics Richard C. Henry, Ph.D.
Anatomy Kenneth V. Anderson, Ph.D.
Biology Robert S. Mellor, Ph.D.
Biochemistry Vladimir Stefanovich, Ph.D.
Chemistry Allen R. Utke, Ph.D.
Electronics Richard Gerdes, B.S.E.E.
Electronics-medical Alvin E. Brown, B.S.E.E.
Engineering James A. Harder, Ph.D.
Exobiology Frank B. Salisbury, Ph.D.
Geology Philip Seff, Ph.D.
Linguistics P. M. H. Edwards, Ph.D.
Mathematics G. K. Ginnings, Ed.D.
Medicine Benjamin Sawyer, M.D.
Metallurgy Robert W. Johnson, Ph.D.
Optics B. Roy Frieden, Ph.D.
Photography John Hopf
Physics Horace C. Dudley, Ph.D.
Physics Rene' J. Hardy, Ph.D.
Physiology Harold A. Cahn, Ph.D.
Psychiatry L. Gerald Laufer, M.D.
Psychology R. Leo Sprinkle, Ph.D.
Religion Robert S. Ellwood, Ph.D.
Science Education A. Henry Swann, Ed.D.

REPRESENTATIVES

Argentina Guillermo Gainza Paz
Australia Peter E. Norris
Belgium Edgar Simons
Bolivia Fernando Hinojosa V.
Brazil Prof. Flavio Pereira
Britain Anthony Pace
Chile Pablo Petrowitsch
Colombia John Simhon
Costa Rica Rodolfo Acosta S.
Cuba Oscar Reyes
Czechoslovakia Jan Bartos
Denmark Erling Jensen
Dominican Republic Guarionex Flores L.
Ecuador Col. Raul Gonzalez A.
Finland Kalevi Hietanen
France Aime Michel
Germany Capt. William B. Nash
Greece George N. Balanos
Greenland Joseph March
Guatemala Eduardo Mendoza P.
Holland D. J. H. Dreux
Hong Kong Alex Pezarro
Ireland Martin Feeney
Italy Roberto Pinotti
Japan Jun'ichi Takamashi
Lebanon Menthir El Khatib
Malta Michael A. Saliba
New Guinea Rev. N. C. G. Crutwell
New Zealand Norman W. Alford
Norway Finn Einar Myhre
Peru Ermanno Maniero
Philippine Republic Col. Aderito A. de Leon
Puerto Rico Sebastian Robiou L.
Singapore Yip Mien Chun
Spain Antonio Ribera
Sweden K. Gosta Rehn
Switzerland Dr. Kurt Kauffman
Tasmania William K. Roberts
Trinidad Eurico Jardim
Uruguay Walter Fernandez L.
Venezuela Horacio Gonzales G.

The Aerial Phenomena Research Organization, Inc. (APRO) investigates and evaluates UFO reports through its Field Investigators Network, in North America and its Representatives in other countries. APRO's official affiliate in Canada is the Canadian Aerial Phenomena Research Organization (CAPRO), Winnipeg, Manitoba, Director Brian Cannon.

Newswires, newspapers, radio and television stations may quote up to 250 words from this publication, provided that the Aerial Phenomena Research

Organization, Inc. (or APRO), Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.

Mrs. Lorenzen to Speak in Illinois

On the 24th of February Mr. and Mrs. Lorenzen received a letter from the Executive Committee of the Aerial Phenomena Club of Central Illinois inviting one of them to speak before the Midwest UFO Conference in Peoria, Illinois on June 13 of this year.

Because of Mr. Lorenzen's current position with a Tucson electronic firm, he would not be able to take time out for the trip at that particular time, so it was decided that Mrs. Lorenzen would accept the invitation.

A recent telephone conversation with Mr. Laird Carter of the Executive Committee of APCCI elicited the following information about the speakers and the agenda for the conference:

Allen R. Utke, Ph.D., Associate Professor of Chemistry, Wisconsin State University, Oshkosh, Wisconsin, and APRO consultant in chemistry, will be the featured speaker for the morning of June 13.

Mrs. Lorenzen will be the featured speaker for the afternoon session. No specific topic has been chosen at this time; however, the topic will be announced in the March-April issue along with further information about the conference.

The featured speaker for the evening session and the whole conference will be Dr. J. Allen Hynek of the Department of Astronomy, Lindheimer Observatory, Northwestern University, Evanston, Illinois and former scientific adviser to the Air Force's Project Bluebook.

At this writing no information is available pertaining to the subject matter of either Dr. Hynek or Dr. Utke's presentations and that information will be contained in the March-April Bulletin also.

Also slated to speak are Ted Phillips Jr. of the Missouri Highway Department and APRO Field Investigator, Leonard Sturm, Electrical Engineer with the Illinois Power Company, and Director of the Decatur, Illinois UFO Research Committee, and John F. Scheussler, Senior Engineer with McDonnell-Douglas Astronautics and Director of the Missouri Section of APRO.

It is hoped by the Headquarters Staff as well as Mrs. Lorenzen that APRO members in Illinois and adjacent states, field investigators and members of the consulting staff in Illinois and adjacent states will make

an effort to attend the conference and support the efforts of the APCCI. Anyone coming from some distance should make their hotel and other arrangements as soon as possible.

Tickets for the conference can be obtained from the Midwest UFO Conference, 726 North St. Anthony Place, Peoria, Illinois, 61604, and checks should be made payable to the Midwest UFO Conference. The breakdown in cost is as follows:

Each session (morning, afternoon and night) \$1.50
All three conference sessions \$3.00
All sessions including lunch \$6.00

Research Award Entries Being Judged

All the entries for the Scientific UFO Research Award, 1970, sponsored by APRO's Olavo T. Fontes Memorial Fund, have now been sent to the Board of Judges. Selection of the winner is expected in about two or three months and it will be announced in either the March-April or May-June Bulletin. All participants will be notified immediately of the outcome.

There were 13 serious entries in total, ranging from physical and aeronautical considerations to the philosophic, religious and psychological aspects. Two of the entries were from non-APRO members. It has been decided not to publish the names of the participants until the judges have reached a majority decision as to which work "is considered the most significant research to further our understanding of the UFO phenomenon."

As originally announced a year ago, Dr. J. Allen Hynek, Head of the Astronomy Department at Northwestern University, is Chairman of the Board of Judges. The other judges are as follows: Dr. Thornton Page, astronomer at NASA's Manned Spacecraft Center, Houston; Dr. Robert L. Hall, Head, Department of Sociology, University of Illinois at Chicago, and Dr. Sydney Walker, III, of Neurodiagnostic Procedures, La Jolla, California. For those who are not familiar with Dr. Walker or his work, the *Symposium on Unidentified Flying Objects* (1968 House Science and Astronautics Committee Hearings) contains the details of research he conducted, as part of Dr. Robert M. I. Baker's presentation to Congress. Drs. Hall and Walker were appointed as

(See Award — Page Four)

Evidence —

(Continued from Page One)

bright red stripe down one side, about an inch long. It was lying on the ground in front of the cabin's porch. It showed up startlingly clear against the drab brown of the rocky ground.

Thus far, the information presented here has consisted entirely of Mr. S's story. However, the following observations were made by the Lorenzens:

Mr. S. lives in a makeshift cabin on the top of a hill. Elderly, he prospects for a living and his "diggings" are evident across the landscape. He has no particular interest in UFOs, has read of them only occasionally in magazines and newspapers. For at least four and probably five years, what may be an important clue to the UFO mystery laid in a tiny, hinged plastic box until the Lorenzens' friend mentioned UFOs, whereupon Mr. S. recalled his experience and the friend urged him to allow APRO to examine the object and perhaps put it through a series of tests. The friend contacted the Lorenzens who in turn got in touch with S.

Mr. S's cabin is situated, as mentioned previously, on a hill. Marching in orderly precision across the hills and arroyos (ditches) north of and behind the cabin, the nearest at a distance of 100 feet, are high tension lines and towers. To the northeast, on another hill within 200 yards of the cabin is an electrical transformer installation.

Another point worth mentioning is the fact that Mr. S's cabin, being utilitarian rather than decorative, has one door and no windows. There was no way for light to enter the cabin except for a space between the wall and the roof which allows the entry of a certain amount of daylight.

The object in question which is at present being examined by qualified scientists on the staff of APRO, may or may not be important, but one additional fact is very interesting:

Between the time that Mr. S. deposited the object in the box and the next time he examined it, it had changed. The color had become a flat whitish-ivory, the bright red stripe had become a deep, dull yellow color, and one end of the object had melted the plastic and adhered to it. Upon removal, part of the white covering split off the main body revealing what appears, in one area, to be a metal core or wire.

This case is one which hinges upon the artifact now in APRO's possession. Further developments will be carried

in a future issue of the Bulletin.

Cigar —

(Continued from Page One)

description. The object was as low as 300 feet after the final descent and over a highly populated area. The sun was in the west at the time and the object in the northeast, under a cloud layer estimated by Dr. Blank to be at about 1,000 feet. The object finally disappeared during a brief period of non-observation (about five seconds). The witnesses, therefore, have no idea how the object departed or disappeared.

Two other witnesses observed the object but did not pay much attention to it. Dr. Blank says they were in an out-of-state car but he thinks he can locate them. Although some may believe that Dr. Blank and his wife observed a conventional object, such as the *Good Year* dirigible, or some other object from *Disneyland*, there are some aspects which cannot be explained in this manner: (a) the descent and falling leaf motion; (b) the emission of "mist" ("angel's hair?"); (c) its sudden disappearance.

This case has been handed over to Mr. Rayford R. Sanders, APRO Consultant in Aeronautics, who lives in the area, and who has done considerable research into the falling leaf motion and other aeronautical aspects of UFO performance. Mr. Sanders' report will probably contain more details not obtained from Dr. Blank over the telephone and these will be presented in the future.

Occupant —

(Continued from Page One)

were clearly seen by all. One of the nurses ran down the corridor to a bathroom and watched the object circle five or six times after which it took off "like a streak" to the northeast.

During the time that Miss Kendall watched the object before she called to Mrs. Wilson, she claimed she observed the following:

The "saucer," resembling a sphere around which was a circular air foil with lights on the rim, was about 60 feet off the ground over a small patio. She estimated it to be about 50 feet overall diameter and that it was hovering at about the level of the third or children's floor, at about 60 feet from the hospital wall. When first seen it was tilted toward Miss Kendall's position so that she could see inside of the upper portion which she felt

was illumined from below rather than above. The top portion was transparent and the light on the bottom (which she saw later) was red.

Inside the transparent "bubble" or "cupola" Miss Kendall claimed that she observed two human-appearing entities. At first they were visible from the side and only from the waist up but when the object tipped toward the hospital she observed their complete forms. Both were standing, one apparently behind the other, and each stood in front of a stool with a back on it. The occupant furthest to her right was facing what appeared to be a chrome instrument panel comprised of large and small "circles" (possibly dials) which were brilliantly lit. She felt that both of the "men" were over 6 feet tall and noted that they both were well built.

As the object hovered the man on Miss Kendall's left turned toward her, then extended his hand and touched the back of the man near the instrument panel who reached down, grabbed a rod-like device with a ball on the top extremity which protruded from the floor. Miss Kendall compared the latter to the "joy stick" of an airplane. The man moved the "stick" up, then down, at which time the disc tilted toward her and she got a good view of the interior including the men from head to toe.

Miss Kendall noted that the hand of the man who apparently alerted the other to her presence, was flesh-colored and human-appearing. Both wore dark clothing and their features were concealed by some kind of head gear. The latter seemed to be similar to the material of the rest of their clothing.

When the object tipped so that her view of the interior was cut off, Miss Kendall called to Mrs. Wilson and asked her to come and look. She said later that she hadn't been afraid, but just was very curious, and had the impression that the disc was having mechanical trouble. She said that it appeared to nearly touch the patio over which it was hovering as it tipped toward the hospital.

Field Investigators in Service

We request all Field Investigators in the Armed Forces stationed abroad to notify APRO of their exact location. APO and FPO addresses give no indication of this. Also, we remind Field Investigators who change address to provide their new phone numbers.

Award —

(Continued from Page Two)

many of the entries were of a psychological/sociological nature and it did not seem fair to have only physicists or astronomers review their work. As stated previously, all the judges were selected because (a) they are *not* APRO members, (b) they have had experience with UFO research in their respective fields and (c) they are not proponents of any explanatory theory.

UFO Trio Over Tucson Area

A 22-year-old man and his 65-year-old uncle observed three dark, disc-shaped objects over the Tucson area at 4:28 p.m. on 27 January 1970. Neither of the two witnesses wish to be identified because of press reports ridiculing the UFO subject and witnesses which they have seen in the past.

Mr. Y and Mr. Z were traveling north on Highway 83 about three miles south of Interstate 10 when the objects were sighted northeast of their location. The three things were traveling northwest toward Tucson. The driver pulled up to Interstate 10 and entered the highway via the on-ramp from the north side of the highway. The objects were nearly parallel with their truck by then and they estimated their speed at no more than 200 miles per hour as the objects pulled ahead of them in the direction of Tucson.

From that time the driver glanced at the objects only occasionally, concentrating on his driving. But his passenger kept his attention riveted on the strange aircraft. The objects diminished in size as they proceeded into the northwest and both men were surprised to see two F4C's rise into the air from the vicinity of Davis-Monthan Air Force Base which is located at Tucson. The jet fighters were left behind as, with a burst of speed, the three discs sped away and disappeared from sight in the northwest.

Only one of the two witnesses has been interviewed to date; he is the uncle who does not believe in UFOs and is convinced the objects are some kind of new, exotic experimental craft despite the evidence of his own eyes. He said the craft were definitely disc-shaped and with well defined contours against the bright blue afternoon sky. If the interview with the second witness yields further details they will be published in a future issue of the Bulletin.

AIAA to Publish Statement On UFOs

As announced in the November-December Bulletin, the American Institute of Aeronautics & Astronautics (AIAA) UFO Subcommittee held a session on January 21 in New York City. Members of the panel were Dr. J. Allen Hynek, Dr. Thornton Page, Dr. James E. McDonald, Mr. Gordon Thayer and Mr. Philip Klass. For those unfamiliar with Messrs. Thayer and Klass, Mr. Thayer was a member of the University of Colorado UFO Project, directed by Dr. Condon, and wrote the chapter *Optical and Radar Analyses of Field Cases* in the Condon Report; Mr. Klass is a staff member of *Aviation Week & Space Technology* and author of the book *UFOs Identified*, in which he attempts to attribute most UFO observations to ball lightning or plasma. Dr. Joachim Kuettner, of ESSA's Research Laboratories at Boulder, Colorado, moderated the session, which was conducted on a question and answer basis. Dr. Kuettner is also Chairman of the UFO Subcommittee.

The UFO Subcommittee is now preparing a statement, based on the results of this panel meeting and other investigations, which will summarize the UFO situation as the Subcommittee sees it and will contain certain recommendations regarding the need for obtaining hard data to resolve the controversy. The statement will be published in *Aeronautics and Astronautics*, journal of the AIAA, and this will be announced in the Bulletin whenever it appears.

One of the panel members, in a communication to APRO, stated that "the panel did not add much to our knowledge (on UFO's). The main thing is . . . that the subject of UFO's was not settled and that scientific study should go on."

Further Psychic Impressions Studies

Robert Young, a senior at the United States Air Force Academy in Colorado, is currently working under the guidance of APRO Consultant in Psychology, Dr. Leo Sprinkle, on a study of persons who have reported telepathic impressions associated with UFO phenomena. He hopes to obtain psychological correlation patterns of such cases. Persons who believe they can be of any assistance to Mr. Young in his study should contact him at Box 4642, USAF Academy, Colorado 80840.

Press Reports

Monona, Iowa, December 7, 1969. Dr. and Mrs. Donald Hurlbut of Elkader, Iowa were flying in the Doctor's light plane over Monona at 5:30 p.m. when they spotted a white, pulsating light near the north edge of the Monona city limits. The Doctor, who was piloting the plane, banked and lowered the plane to get a better look. They first thought the light was that of a helicopter but when they approached it they found it had no running lights or beacon such as those on commercial or military craft.

After Hurlbut took chase, the object headed out over farm fields, highways and wooded areas at an estimated altitude of 300 feet and at a speed of 150 miles per hour. Hurlbut's plane was making a ground speed of 110 to 120 m.p.h. and he could not close on the object. The closest he came was about a half mile. At that distance the light appeared as a quarter-inch diameter light at arm's length. It was pure white, very intense and clear and pulsed at a rate of once each second.

Hurlbut told the *Elkader, Iowa Register* that the object seemed to be under intelligent control as it speeded up, changed course and nearly stopped several times. At one time it appeared as though it was about to land. The sighting lasted 10 minutes until Dr. Hurlbut turned the plane and headed for the Elkader Airport.

After he landed, Hurlbut, Mr. Don Meyer and *Register* reporter Bob Griffith got into the plane and returned to the area where the object was last seen but could not find it. However, another odd light was spotted between Monona and Waukon. Several other planes were in the area and each time an aircraft neared it, it disappeared for a time.

Duncan, B.C., Canada, January 6, 1970. Mrs. G. C. Drinnen observed a "revolving red object" which hovered before going straight up into the air. She said she could not distinguish a definable shape but that one side seemed to be darker than the other.

Lins, Brazil, January 6, 1970. A round, bright silvery object surrounded by a yellow-blue circle was sighted by the Chief of Police and a police clerk at 3:30 p.m. from Police Headquarters. They watched it climb vertically until out of sight.

Imijärva, Finland, January 8, 1970. Two young men, who were skiing in the woods at Imijärva, near Heinola stopped to rest and were startled by a

(See Press — Page Five)

Press —

(Continued from Page Four)

dazzling light which appeared above and close to them. A round circle of light on the snow was observed at the same time. How the object left is unclear; however, after it was gone, one of the men became ill and vomited, finding it difficult to move and was short of breath. The other experienced a slight but immediate swelling in his face. Both men consulted doctors, and it has been suggested that the phenomenon was a kind of electrical discharge or corona of the atmosphere.

San Mateo, California, U.S.A., February 10, 1970. Fifteen-year-old Laurie D. Walther claims she saw a UFO at 8:30 p.m. She said she was standing on a street corner and her attention was arrested by a flash of light in the northeast. Then, she said, there appeared to be a saucer-shaped object about 25 feet in diameter hovering about 50 feet over the electrical transmitters at Coyote Point. Red and blue lights were exhibited by the object, she claimed.

Object Over Sacramento

Three people witnessed the passage of an object over Sacramento, California at 8:25 p.m. on February 6 of this year.

F. E. Burchardt and his wife spotted the object to the left of Orion and left of and below the star Sirius. It followed a slow curving course until nearly opposite Sirius (and to the right), then stopped and turned bright yellow. It then rose in a steep climb and dropped smaller objects every 30 seconds. There were four "drops" and the object turned yellow at each drop, returned to orange color while climbing. After four drops were observed the object continued to climb, and flared a bright yellow color before disappearing at 8:30 p.m. at a point approximately two-thirds of the distance between Sirius and Alhena.

Burchardt watched the phenomenon through 7 x 50 wide-angle binoculars. After the object disappeared, he called McClellan Air Force Base where another observer was being interviewed. He learned that the object had been in sight 10 minutes before he had spotted it. McClellan said there was no radar or visual sighting of the object there, however.

RENEW NOW!

\$5.00 Per Year



Interesting Sighting Over Greece

The following report was forwarded to APRO Headquarters by Christos Efthimiopoulos, a Professor of Mathematics at Athens, Greece. On the morning of December 4, 1969 at 4:45 a.m. Mr. Efthimiopoulos was on the terrace of his home when he observed an object which appeared in the south. It was moving rapidly toward the north and a part of its flight path took it above the Hymetos Mountain. Its observed trajectory was lineal and parallel to the horizon and its speed appeared to be uniform. Elevation 30 degrees.

Professor Efthimiopoulos made the following observations: Object travelled through 80 degrees of arc during a period of three seconds. Its shape was that of a mono-basic spherical section (see illustrations above) and its front and up to 60 degrees of its total form was brightly illuminated (white light). The rest of the object was sufficiently illuminated for the whole shape to be distinctly visible. Its illumination did not seem to be produced by any internal source but a result of the diffused light produced by the friction of its leading edge against the atmosphere. The Professor felt that the illumination indicated the object was moving through the atmosphere. No noise accompanied its passage and it was so rapid that by persistence of vision it gave the impression of having a tail.

The diagram shown above is described by Dr. Efthimiopoulos (from right to left): "A. At this point I caught sight of the brightly shining object." At D the Professor decided the object was a "flying saucer" or

UFO due to its distinct shape. At E he observed it with most clarity. At F the object disappeared, probably into or behind clouds or it went out of the atmosphere.

AAAS, Condon and Rothberg

As had been programmed for over a year, the American Association for the Advancement of Science (AAAS) held a UFO Symposium on December 26 and 27, 1969, during its annual meeting in Boston. The symposium is considered the most important the scientific community has ever held on UFOs. Press coverage was good and the symposium was a success in the sense that it elevated the UFO subject to a higher plateau: that of scientific inquiry and discussion.

APRO was represented by Dr. Vladimir Stefanovich, Consultant in Biochemistry, from the Boston University Medical Center, and Dr. John S. Derr, member, from MIT's Department of Earth and Planetary Sciences. Dr. Derr provided APRO with full information and wrote an article on the symposium for the Bulletin (published in the Nov.-Dec. 1969 Bulletin).

One of the highlights was a press conference organized by Dr. Thornton Page, of NASA's Manned Spacecraft Center at Houston, in which it was revealed that Dr. Edward U. Condon, former Director of the University of Colorado's UFO Project, not only refused to attend the symposium but attempted to have it stopped through various channels, including the Vice-President of the United States. Although Mr. Spiro Agnew heads President Nixon's space advisory body, there would be nothing he could do

(See AAAS — Page Six)

AAAS —

(Continued from Page Five)

to prevent the AAAS, a private organization, from holding a UFO symposium, even if he wished to. Consequently, it is not clear why Dr. Condon, a former President of AAAS and the American Physical Society (who has repeatedly stated that he does not want to be involved in further UFO controversies) approached the Vice-President on the subject. In fact, Dr. Condon's move was so startling that APRO queried several sources involved in the AAAS symposium, including Dr. James E. McDonald (who commented on the subject to the press in Boston), and ascertained that the allegation was true.

Perhaps Dr. Condon's attempt to scuttle a scientific meeting on a subject he personally does not consider important will be understood better after studying his article "UFOs I Have Loved and Lost" in the December, 1969, issue of the *Bulletin of the Atomic Scientists*. (This article is based on a lecture presented before the American Philosophical Society in April, 1969.) Echoing his careful phraseology in the *Condon Report*, he states: "Some UFOs may be such (extraterrestrial) visitors, it may be postulated, and some writers go so far as to say they actually are. To discover clear, unambiguous evidence on this point would be a scientific discovery of the first magnitude, one which I would be quite happy to make. We found no such evidence, and so state so in our report. But it is not true to say that we 'proved that flying saucers do not come from outer space.' All that can be said is that, of the cases we looked into carefully, we found no evidence in support of the hypothesis of their extra-terrestrial origin."

After this objective statement, Dr. Condon went into his usual discussion of contactees, occultism and astrology and then stated: "Perhaps we need a National Magic Agency to make a large and expensive study of all these matters, including the future scientific study of UFOs, if any." In view of the fact that the American Institute of Aeronautics and Astronautics (AIAA) is doing research and will be doing research on aerial phenomena, this statement may leave one wondering as to its real intent.

Dr. Condon concludes his article with yet another startling statement: "Where corruption of children's minds is at stake, I do not believe in freedom

of speech. In my view, publishers who publish or teachers who teach any of the pseudo-sciences as established truth should, on being guilty, be publicly horsewhipped, and forever banned from further activity in these usually honorable professions. Truth and children's minds are too precious for us to allow them to be abused by charlatans."

Following a less severe philosophy, another former member of the University of Colorado UFO Project, Dr. Gerald Rothberg, wrote an article in the December issue of *Physics Today*, published by the American Institute of Physics. Dr. Rothberg, an Associate Professor of Physics at the Stevens Institute of Technology, was actually reviewing the *Condon Report, UFOs? Yes!* by Saunders and Harkins and *Aliens in the Skies*, the latest book by John Fuller (which, save for the introduction, is directly copied from the July 29, 1968, House Science and Astronautics Committee UFO Hearings). However, Dr. Rothberg also effectively demonstrates that the Condon study by no means disproved the Extraterrestrial Hypothesis (ETH) for UFOs but rather that it was "... plausible that the residue of unexplained reports (in the *Condon Report*) could also be explained if more information were available, and that the hypothesis of ETI (Extraterrestrial Intelligence) is unnecessary and unproductive." However, it is this "nagging residual" of unexplained cases which keeps him from dismissing UFOs and he says: "when you arrive at the scene of a sighting within 30 minutes and an otherwise normal, respectable family tells you a large luminous disk with a dome and a flashing red light hovered 30 feet over their heads, it is hard to believe they did not see something real and strange."

Dr. Rothberg ends his article by calling upon "some reputable journal to recognize this legitimate scientific controversy and to publish analyses of UFO reports with the ETI proponents also stating their results. Who knows? They may just be right."

Canadian New Year's Day Sightings

During the time that he was involved with the Cowichan hospital case, Garry Jopko came upon other reports in the general area which he immediately set about to investigate. One of these was the New Year's Day sighting at Mill Bay, B.C., Canada between 6:30 and 7:00 p.m. It involved

multiple witnesses and the evidence indicates that all observers saw essentially the same thing.

Case No. 1 took place at 7 p.m. and the following is Mr. Jopko's report:

"While checking his equipment aboard his tugboat, Jim Drummond, shipwright, noticed an orange ball of light about one mile away to the north. At the same time, his mother, Mrs. Bea Drummond, noticed it also and called her son's attention to it. Jim Drummond's first impression was that the object was something unusual — so he decided to get his camera, a Polaroid, and capture it on film. He had his camera focused and ready to shoot when the thought came to him that all the picture would show would be a spot of light as if a picture of a light bulb had been snapped. By this time the object had come closer and had increased in size until it was the size of an orange. Also, it was as bright as a spotlight and as hard to look at. At this point the object was overheard and it became stationary. Grabbing a telescope which was nearby, Mr. Drummond started focussing it when a ray of light shot out from the object and then curved toward the ground — although the light beam lasted for about 3 or 4 seconds, Mr. Drummond did notice that it was composed of a series of dashes curving toward the ground. Unfortunately, he failed to notice whether the dashes were moving or stationary. Putting his telescope on the object and focussing it, he noticed that the object looked like two cups put on top of one another, lip to lip, and that it had a very sharp outline in black. Around the middle of the object was a transparent or lighted area which consisted of four dome-shaped lights like tips of candles, which shone a cold whitish-blue in contrast to the orange color of the main object. There was no sound or movement. Suddenly, the object took off fantastically fast toward the south, rising as it sped away until it disappeared into the clouds about a mile distant. Because an airplane beacon was located on a nearby mountain, Mr. Drummond was able to estimate that the clouds were between 800 and 900 feet altitude. Also, it was computed that the object had flown overhead in a gigantic arc from north to south; that is to say, it came down from the north and rose up again in the south. Mr. Drummond, while keeping his eyes on the object, noticed that the wind was from the west at about 3 miles per hour and that the temper-

(See Canadian — Page Seven)

Canadian —

(Continued from Page Six)

ature was about 34 degrees F. Visibility was clear up to 5 miles away after which the surrounding mountains interfered. All during the sighting Mr. Drummond felt very excited but at no time did he panic. He was collected and calm enough to gauge different physical and environmental conditions in order to try to find out what the object was and how big it was. Next day, in order to estimate the size of the object Mr. Drummond leveled his telescope at the nearby government wharf and, without refocussing his telescope, he compared what he saw at the wharf with the object of the previous night. In his estimates, the object was from 35 to 50 feet in diameter, at about 300 feet altitude when overhead and it was first seen from one mile away. Duration of sighting: 15 minutes.

Meanwhile, Mrs. Drummond was watching also. She was calling her son for supper when she looked toward the north and saw a bright, moving object coming toward her house from across the bay. Although it was glaringly bright, Mrs. Drummond was able to make out that it was a sort of yellowish-orange in color. Calling her son's attention to the object, she watched it for a brief moment and then went in the house to call her neighbors so that they could see the object also. Unfortunately some of the neighbors did not answer the phone and those who did failed to see anything unusual. Mrs. Drummond then went outdoors again to watch the object; by this time it was overhead and going to the south, rising as it went. At this particular moment, she felt a tingling sensation on her left hand as if a hot liquid had been sprinkled on it. She mentioned this to her son Jim who said that he didn't feel anything unusual. Meanwhile, the object was finally obscured by the trees which surround the house. The total time of Mrs. Drummond's sighting was from 2 to 3 minutes. When the object was finally hidden by trees it was still very difficult to look at because of its brightness.

Case No. 2

The second sighting took place between 9:20 and 9:30 p.m. on the 10th of January 1970. The details:

Mr. Robert Scales and Dick Scales (8) were driving in a car in Mill Bay, B.C. At sometime between 9:20 and 9:30 (Dick stated 9:20 as the beginning of the sighting and Richard

Scales 9:30). The sky was cloudy and there were snow flurries. An object, described by Dick Scales as circular and amber-colored surrounded by a circle of lights, came out of the south toward the north, stopped overhead and then headed into the south. It was first seen through the windshield of a car, but the witness stepped outside to observe the object for the remaining time. The duration was 7-8 minutes, in Mr. Scales' estimate.

According to R. Scales, the moon was partly obscured by clouds in the west and no astronomical bodies were visible. He described the object as amber in color and round in shape. He said it came from the south, stopped directly above him and Dick Scales, then moved slowly off into the southwest, then picked up speed and disappeared in a burst of light. He did not describe the circle of light noted by Dick, but described it as a halo.

Both men compared the approximate size as that of a pea at arm's length when first sighted. Dick said that at the closest point it was comparable to a basketball at arm's length and Robert Scales said it was as large as a man's head at arm's length.

Case No. 3

Somewhat conflicting testimony comes from Mrs. W. J. Clarke of Mill Bay who sighted what might have been a different object. He claims the moon was in the southeast at the time and there were some clouds. The object he observed was described as a pale white object with four or five lights near the bottom and a ray of light which seemed to curve from bottom to top of the object. It was further described as the apparent size of a grapefruit at arm's length, traveling much slower than an aircraft. The duration of the sighting was 10 minutes after which the object went out of sight behind trees in the southeast.

Mrs. Eugenia Orland sighted a round dark-orange object at the same time. It was above clouds, she said, and stratus clouds passed in front of it occasionally. The duration of her sighting was approximately five minutes. She did not see it disappear because she went into her house and when she looked for it through a window it was no longer in sight.

There were other observers in Case No. 3, but the length of time it was visible and the fact that it was motionless until it "blinked out" indicates that it could have been another

balloon-and-candles practical joke. Roger Peters, a teenager, observed an object at 11:20 p.m. that same night which he felt was a lighted balloon and was inclined to think that the 9:30 object might have been the same.

Notes on the Hostility of UFOs

By Aime Michel

The lamb which I raise, which I take care of, which I nourish, which I protect from the wolf—it loves me. It seeks its protection near me, it licks my hand. After all this, I shear it. I kill it and I eat it before the eyes of his brothers who have seen all that for thousands of years and continue to love me and to lick my hand, never having understood.

The baby which I take to the hospital and which I leave in the hands of a surgeon in order to undergo a cruel operation—he is seized with despair and perhaps he hates me, although the operation will save his life.

There is no way in the world to make the lamb understand that the real wolf is me, nor to make the baby understand that I am making him suffer out of love: in these two cases, what I have done to them is understandable only through the idea of time, irremediably inaccessible to their thought. They can ask themselves the question concerning my goodwill or my hostility toward them, but they are irreparably incapable of finding the true answer to that question.

If the UFOs dominate us by an inequality comparable to that by which we dominate the lamb, to claim to make a decision concerning their hostility or their goodwill toward us is equal to claiming to translate Spinoza's Ethics into bleatings. The translation into the wailing of a baby is hardly any more promising. We can then legitimately speculate on their goodwill or their hostility only on the condition of previously admitting that there exists between them and us no inequality at all.

But even if one rejects all other inequality, one can hardly contest the fact that "they" are here at our home, that we are not at "their" home, and that that has been going on for a long time and that when we were still scratching our fleas, "they" themselves were already doing here that which our present-day science declares to be impossible.

We ought therefore to give up trying to find out if "they" are friendly

(See Notes — Page Eight)

Notes —

(Continued from Page Seven)

or hostile. But perhaps it is not necessary to know. The wolf does not know any more about man than the lamb does. But the wolf bites the hand which the lamb licks. Wolves which have stopped biting have become dogs.

Incapable of guessing and of understanding the purposes of man, the wolf at least learns how to recognize and follow his tracks, to disclose his presence, to foresee his behavior. I do not see why we could not do all that. The presence over our heads and in our countrysides of these UFOs which reveal themselves to us but avoid us must be admitted as the greatest challenge of our history and treated as such. Perhaps they are the great trial (test) which will bring us into our adulthood, like those manhood rites which the adolescents of primitive societies must undergo in order to become men. Perhaps the human level is the adolescence of the universal life.

Speculation

Occasionally a member comes up with some healthy conjecture concerning some phase of the UFO mystery. Vincent White, a junior at the University of Missouri at Kansas City, majoring in physics, has submitted the following concerning "The Problem of Non-Interference" which the staff felt would be interesting to the general membership:

One especially notable fact about UFOs and their occupants is the extreme diversity and variety among them. A question naturally arises. What is the degree of cooperation and/or control among them? Given thousands of years of reconnaissance among these multi-racial groups why the apparent total unanimity to remain hidden? This is of course only how it appears on the surface. It would be so easy for a single errant misbehaving UFO to blow the whole cover. Such as one UFO landing for five minutes on the White House lawn!

Does this imply control or simply cooperation among them? If it is control how is it enforced or monitored? Is it possible that some of the so-called hostile acts were violations of the non-interference code? The situation can perhaps be more clearly understood by means of an analogy. Consider if the moon were inhabited by primitive civilizations. What would happen if we had cheap and easy space travel to the moon? Would all nations agree to refrain from even

revealing their presence to the Lunar-ians, refrain from even flying over densely populated areas? This is not to mention outright exploitation and pillage. Could we enforce such a ban over a single globe? I think not. Yet the apparent situation with regard to UFOs is much more incredible as they appear to originate from many stellar systems. It would appear that only the most widespread and total agreement and/or control could create the present situation. Hence there must be either a high degree of interstellar organization and government or an amazingly high degree of unanimity of attitude regarding planets like earth.

If there is an advanced interstellar government in this region of the galaxy, what can we infer? For example, knowing an estimate of the number of races or distinct groups investigating earth and from that estimating the probable number of worlds or stellar systems they originate from, what can we know? Knowing something about stellar distances near the sun is it possible to say what the minimum propulsion speed of their interstellar craft is, or the degree of evidenced cooperation or control among them? These sets of concepts are interrelated and knowing even one of them we might learn much.

One problem emerges if we consider UFO history. Considering the magnitude of UFO activity across the globe over thousands of years why not the discovery of just one lost or misplaced alien artifact or device? Why not one? Are they that careful? This would appear to be a crucial point in remaining hidden. The discovery of a single clearly extraterrestrial device would of course destroy secrecy besides possibly drastically altering our technology. How do the UFOs make certain they never make any mistakes in this area? One possible answer is that everything they have is tagged and coded; perhaps even living beings. By tagging I mean that all artifacts and materials would give off some kind of radiation or signal visible only to them. It would appear that technological leakage might be considered one of the greatest violations of the non-interference code. A single UFO-naut could contact someone and leak revolutionary information—scientific, mathematical, philosophical, etc. that would have monumental consequences. It would appear that such an act would be extremely easy to carry out. Why hasn't it—Doesn't insanity or crime occur among them? Their apparent perfection in these matters seems staggering.

From the other side or planned puzzle and paradox:

How would it be best to plan a maximum of worldwide detailed reconnaissance without revealing existence? Some very simple rules might be applied which would completely confuse anyone trying to analyze and make sense of UFOs.

A. Raise noise to signal level.

1. Conjoin UFO waves with natural phenomena. Such as Aurora Borealis, meteor showers (perhaps artificial), atmospheric peculiarities, temperature inversions, etc.

2. Disguise craft to appear as natural phenomena. For example, natural plasma, clouds, meteors, etc.

3. Disguise craft to appear as terrestrial aircraft in shape, maneuvering, sound (add jet and propeller sounds) and conjoin UFO waves temporally with Air Force exercises, etc.

4. During waves land and contact the insane and mentally incompetent individuals. Plant wild stories to create public incredulity and official derision. The more fantastic the story, the better. Take contactees on ridges, give them bits of ordinary terrestrial matter as proof of your existence. Investigate contactees' background and tailor story accordingly. Make the story contradictory and violate laws of science while injecting wild religious nonsense.

5. Commit acts that appear to conflict with advanced intelligence and technology. Such as playful following of ground and air vehicles in an apparently dangerous manner, mock dog fights with UFOs and terrestrial craft, wild gyrations and dances in the atmosphere. When on surface near earthlings act like an animal, growl, make threatening gestures and in general act in an obviously irrational fashion. Attempt to induce panic in witnesses to distort reports.

B. Reduce signal to noise level.

1. Avoid populated areas, always fly at night if possible, at highest speeds commensurable with data gathering.

2. Conjoin waves with earthling hoax if possible.

3. Appear when news media is pre-occupied and saturated with news stories. Such as during wars, political events, riots, natural disasters etc. Minimize activity during quiet news periods. Conjoin activity with any outbreak of faddism, psychological inability and crime.

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85712, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

THE A.P.R.O. BULLETIN

OBJECT OVER SCRANTON, PENNA.

Space News

Dr. J. Allen Hynek, former scientific advisor to the Air Force's Project Bluebook and Head of the Lindheimer Observatory at Northwestern University, has informed us that personnel at the Corralitos Observatory, Las Cruces, New Mexico, were tracking and photographing Apollo 13 at the time that the explosion occurred in the service module. The people manning the telescope and camera at first merely thought that the spaceship had brightened momentarily for some reason. Later, however, they learned that an explosion had occurred and notified Mission Control at Houston, Texas. A representative of Mission Control rushed to the observatory and collected the film. The film is still with the Houston group although prints have been forwarded to Corralitos. The film may be very important in helping NASA scientists to determine the precise cause of the failure of the service module.

Although the APRO Bulletin generally confines its contents to UFO-connected subjects, it was felt that because of the likelihood that someone might attempt to connect the service module explosion with UFO's, it should be pointed out that from the information so far available, the evidence indicates an internal (in the service module) cause.

THIS ISSUE

UFO Reports were kept to a minimum in this issue in order to accommodate the study accomplished by Mr. Paul Smith which relates to UFOs and power failures, to be found elsewhere in the Bulletin.

NEXT ISSUE:

Interesting new information about the Ubatuba magnesium and the new physical evidence case.

Analysis of Conrad Space Photos

By DR. JAMES HARDER

Dr. Harder is Professor of Engineering at the University of California at Berkeley and a consultant in engineering for APRO.

The thousand-odd page Condon Report ("Scientific Study of Unidentified Flying Objects") contains an enormous mass of material that most readers will find to be difficult and tedious; however, buried under this mass of data are many provocative and interesting bits of information. It is almost as if the designers of the report had intended to produce a tedium that would carry the unwary reader, by its momentum, past the evidence that would tend to undermine the conclusions they had presented in Section I.

One such bit of information is contained on pages 198-200 of the Bantam edition in a chapter written by Professor Franklin Roach on "Visual Observations Made by U.S. Astronauts." The sighting was made by Conrad, who had a far visual acuity as measured before the flight of 20/15, and after the flight of 20/12.5 (page 192). The following paragraphs are quoted from the text (page 198):

PROTON III

An interesting example of an unexpected sighting of another spacecraft was made by the Gemini 11 astronauts. Quoting from the transcript (GT-11, tape 133, page 1):

We had a wingman flying wing on us going into sunset here, off to my left. A large object that was tumbling at about 1 rps and we flew—we had him in sight, I say fairly close to us, I don't know, it could depend on how big he is and I guess he could have been anything from our ELSS* to something else. We took pictures of it.

The identification of the sighting
(See Analysis — Page Three)

The following report was investigated and submitted to Headquarters by Field Investigator Hal Redner of Livingston, New Jersey. The Lorenzens had the pleasure of visiting with Mr. Redner in early March when he was on a business trip which brought him to Arizona.

At 8:15 p.m. on the night of Saturday, March 21, Sgt. Charles Reina and Patrolman Al Sames of the Scranton Police Department, were on duty when Sames called attention to an unusual appearing light in the east. The light was surrounded by an orange glow. Reina's first reaction was that it was merely the light of an airplane and said so. But Sames pointed out that it was not moving, whereupon Reina took a second look and realized that the light was stationary. The patrol car had passed Meadow Brook bridge and proceeded just about 20 feet beyond it when Sames stopped the car so that they could watch it. The object at that time was at about 45 degrees elevation, and had an apparent diameter of about one-fourth that of the full moon. Reina got out of the car and Sames remained in his seat behind the wheel, the engine running. Reina said later that he felt that the object at that time was over the railroad tracks east of them.

Shortly after the patrol car was stopped, the object began to move up and away from them until it was even with the crest of a hill, then it stopped. Sgt. Reina called a car in the Providence section of Scranton and asked if the light was visible from their location but because the patrolman in the car was located in a valley, his view was cut off by surrounding hills. A second car was called, but they were not able to catch sight of the light either.

At this point, the object began to move to the south and Reina obtained Patrolman Richard Heier on the radio who was stationed at Mountain Lake in the East Mountain Section, because he got the impression that the light

(See Scranton — Page Three)

THE A.P.R.O. BULLETIN

Published by

THE AERIAL PHENOMENA
RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road

Tucson, Arizona 85712

Phone: 602-793-1825 and 602-326-0059

Copyright 1970

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

A.P.R.O. STAFF

International Director L. J. Lorenzen
Assistant Director Richard Greenwell
Secretary Coral Lorenzen

CONSULTANTS

| | |
|-------------------|-------------------------------|
| Aeronautics | Capt. William B. Nash, B.S.E. |
| Aeronautics | Rayford R. Sanders, M.S.M.E. |
| Astronautics | John F. Schuessler, B.S.M.E. |
| Astronomy | Leo Vern Standeford, Ph.D. |
| Astrophysics | Richard C. Henry, Ph.D. |
| Anatomy | Kenneth V. Anderson, Ph.D. |
| Biology | Robert S. Mellor, Ph.D. |
| Biochemistry | Vladimir Stefanovich, Ph.D. |
| Chemistry | Allen R. Utke, Ph.D. |
| Engineering | James A. Harder, Ph.D. |
| Exobiology | Frank B. Salisbury, Ph.D. |
| Geology | Philip Seff, Ph.D. |
| Linguistics | P. M. H. Edwards, Ph.D. |
| Metallurgy | Walter W. Walker, Ph.D. |
| Mathematics | G. K. Ginnings, Ed.D. |
| Medicine | Benjamin Sawyer, M.D. |
| Metallurgy | Robert W. Johnson, Ph.D. |
| Metallurgy | Walter W. Walker, Ph.D. |
| Optics | B. Roy Frieden, Ph.D. |
| Photography | John Hopf |
| Physics | Horace C. Dudley, Ph.D. |
| Physics | Rene' J. Hardy, Ph.D. |
| Physiology | Harold A. Cahn, Ph.D. |
| Psychiatry | L. Gerald Laufer, M.D. |
| Psychology | R. Leo Sprinkle, Ph.D. |
| Religion | Robert S. Ellwood, Ph.D. |
| Science Education | A. Henry Swann, Ed.D. |

REPRESENTATIVES

| | |
|---------------------|-------------------------|
| Argentina | Guillermo Gainza Paz |
| Australia | Peter E. Norris |
| Belgium | Edgar Simons |
| Bolivia | Fernando Hinojosa V. |
| Brazil | Prof. Flavio Pereira |
| Britain | Anthony Pace |
| Chile | Pablo Petrowitsch |
| Colombia | John Simhon |
| Costa Rica | Rodolfo Acosta S. |
| Cuba | Oscar Reyes |
| Czechoslovakia | Jan Bartos |
| Denmark | Erling Jensen |
| Dominican Republic | Guarionex Flores L. |
| Ecuador | Col. Raul Gonzalez A. |
| Finland | Kalevi Hietanen |
| France | Aime Michel |
| Germany | Capt. William B. Nash |
| Greece | George N. Balanos |
| Greenland | Joseph March |
| Guatemala | Eduardo Mendoza P. |
| Holland | D. J. H. Dreux |
| Hong Kong | Alex Pezaro |
| Ireland | Martin Feeney |
| Italy | Roberto Pinotti |
| Japan | Jun'ichi Takanashi |
| Lebanon | Menthir El Khatib |
| Malta | Michael A. Saliba |
| New Guinea | Rev. N. C. G. Crutwell |
| New Zealand | Norman W. Alford |
| Norway | Finn Einar Myhre |
| Peru | Ermanno Maniero |
| Philippine Republic | Col. Aderito A. de Leon |
| Puerto Rico | Sebastian Robiou L. |
| Singapore | Yip Mien Chun |
| Spain | Antonio Ribera |
| Sweden | K. Gosta Rehn |
| Switzerland | Dr. Kurt Kauffman |
| Tasmania | William K. Roberts |
| Trinidad | Eurico Jardim |
| Uruguay | Walter Fernandez L. |
| Venezuela | Horacio Gonzales G. |

The Aerial Phenomena Research Organization, Inc. (APRO) investigates and evaluates UFO reports through its Field Investigators Network in North America and its Representatives in other countries. APRO's official affiliate in Canada is the Canadian Aerial Phenomena Research Organization (CAPRO), Winnipeg, Manitoba, Director Brian Cannon.

Newswires, newspapers, radio and television stations may quote up to 250 words from this publica-

tion, provided that the Aerial Phenomena Research Organization, Inc. (or APRO), Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.

Note:

Although it is the policy of APRO to answer all mail, a stamped, self-addressed envelope will both speed replies and maintain a greater proportion of funds for research.

The Midwest Conference

Since the January-February Bulletin was mailed, the following additional information has been obtained pertaining to the Midwest UFO Conference to be held at the Olin Hall of Science at Bradley University in Peoria, Illinois on the 13th of June 1970. The conference is sponsored by the Aerial Phenomena Club of Central Illinois.

Speakers will be: Dr. Allen Utke, Associate Professor of Chemistry, Wisconsin State University, Oshkosh, Wisconsin, and Consultant in Chemistry to APRO, will be the morning speaker and the title of his talk will be "UFOs and the Problem of Scientific Evidence." Mrs. Lorenzen, Secretary of APRO, will speak on "UFOs 1970 — An Up-to-Date Report" at the afternoon session. She will deal with new findings related to the Ubatuba Magnetism, the artifact recovered in Arizona in February and an analysis of UFO activity in 1969.

At the evening session Dr. J. Allen Hynek, former consultant to Project Bluebook and Chief of Lindheimer Observatory, Northwestern University, will deliver his talk: "UFOs and the 70s — A Positive Program."

In addition to the above-named speakers, Mr. Ted Phillips, Jr. of Sedalia, Missouri, an employee of the Missouri Highway Department and APRO Field Investigator, will speak and show slides related to the subject: "Burned Circles and Saucer Nests: What Is Their Significance?" Mr. Leonard W. Sturm, electrical engineer and APRO Field Investigator who is employed with the Illinois Power Company at Decatur, Illinois, will discuss "Electro-Magnetic Effects Associated with UFOs."

The other featured speaker will be Mr. John F. Schuessler, Senior Engineer at McDonnell-Douglas Astronautics of St. Louis, Missouri. He will present "The UFO, Just Beyond the State - of - the - Art." Mr. Schuessler served as life support engineer on the Gemini Project and is currently responsible for environmental condi-

tions within the orbital workshop space station being constructed by McDonnell-Douglas.

The fee for the entire conference including all speakers and luncheon, is \$6.00. Admission for the single sessions (morning, afternoon, evening) is \$1.50 each, or \$3.00 for all three sessions.

Advance reservations to include the luncheon must be made before June 6, 1970.

We would like to urge all APRO members within a reasonable distance of Peoria to attend. Mrs. Lorenzen will be very happy to meet the many people with whom she has worked and corresponded for so many years.

Make your reservations now! Advance reservations can be made by writing to the MIDWEST UFO CONFERENCE, 726 N. St. Anthony Place, Peoria, Illinois 61604.

APRO Illinois Section Dissolved

On the 23rd of April 1970 the Board of Directors of APRO moved to endorse the growing success of APRO's Field Investigators Network by dissolving the APRO Illinois Section. With Field Investigators reporting directly to APRO Headquarters, the Section as such had become largely redundant and it was therefore decided to discontinue it. Influencing the timing of this decision were the facts that former co-chairman Robert Achzehner had recently undertaken a time-consuming manufacturing venture and former co-chairman Walter Andrus had become more and more involved in another organization. Both will continue as Field Investigators. The Staff urges all Illinois members to submit reports and communications directly to APRO Headquarters in Tucson.

New APRO Zip Code

The Post Office Department in Tucson has designated a new Zip Code for the area in which the APRO offices are located. It is now 85712, *not* 85716. The rest of APRO's address remains unchanged.

The editor takes this opportunity to request all members who write to APRO on any subject to print their full address including Zip Code.

Send Address Changes!

Scanton —

(Continued from Page One)

was over the Number Five reservoir there. Heier viewed the light also. When the object moved from its initial position east of Sgt. Reina up and away to the crest of the hill, it gave the appearance of about one-eighth the size of a full moon and when it moved south it became even smaller. After its move to the south it stopped again, then turned east. Reina turned on the rotating red light on top of the patrol car and the object moved toward his position, becoming brighter and larger. Reina said to Sames, jesting, "Get the shotgun out." Whether by coincidence or not, at this point the object flashed a bright red, then receded into the distance and was out of sight within 10 seconds. When Reina said "Get the shotgun," Sames turned off the engine to get the keys and unlock the trunk for the shotgun and Reina called Patrolman Heier to tell him that the object was now in the southeast. No sound was heard at any time during the sighting.

The action thus far spanned a period of approximately 10 minutes. At 8:25 Sames started up the patrol car and the pair drove to Highway 81 and Davis street, pulled off the highway and stopped. A local free-lance photographer pulled up and asked where the "thing" was—he had apparently been monitoring police calls. The three men began to scan the sky and spotted a similar object which was on a flight path from east to west. This object, however, did not maneuver, merely flew across the sky and disappeared into the west.

Following the sighting, at 10 p.m., Reina received a call from the State Police reporting that a man had reported in that evening and claimed that he had been followed by a light which hovered over his car. The man seemed to be very frightened and his name was not obtained.

Subsequent conversations with Sgt. Reina revealed that he knew of several other sightings in that general area in the past few years which Mr. Redner hopes to be able to follow up at a later date.

Analysis —

(Continued from Page One)

(tape 209, page 2) was given as follows:

We have a report on the object

sighted by Pete Conrad over Tananarive yesterday on the 18th revolution. It has been identified by NORAD as the Proton III satellite. Since Proton III was more than 450 kilometers from Gemini 11, it is unlikely that any photographs would show more than a point of light.

* ELSS = extravehicular life support system

198

Fortunately, they were able to take two photographs of it, which are reproduced as plates 17 and 18 following page 472 of the text. From the size of the image of 100x enlargements and the focal length of the lens used, 38mm, Roach was able to calculate the angle subtended by the widest separation of the four lights that appear in each photo. This was 0.45°, corresponding to a separation of 3.5 km. at the inferred distance of 450 km. There is no reference for angular orientation in the two plates, but from the differential brightness and relative position of the four highlights there is definite evidence for the tumbling that Conrad reported.

In an accompanying figure, (fig. 4, page 191) Roach shows that the Orbiting Solar Observatory, with its sails broadside to the observer, would have an apparent magnitude of 5 when viewed from a distance of 400 km. Assuming Proton III to have a visibility on the same order of magnitude as the OSO, it seems impossible that Conrad could have seen it, let alone report "A large object." Furthermore, an object or set of objects with a separation of 3.5 km. could not appear to tumble at 1 rps unless they were moving at a speed on the order of 10 km./sec. around each other; it would seem impossible for such a set of hypothetical objects to maintain their relative position in the face of the centrifugal forces associated with such velocities.

What did Conrad see? "a large object"; "a wingman flying wing on us." Fortunately we have a measure, from Roach's analysis, of the angle subtended by the object at the Gemini spacecraft: 0.45°. This is very nearly the angle subtended by the full moon (average 0.53°), and suggests that an astronaut with 20/12.5 far vision should have had no difficulty in seeing it.

When this analysis was brought to the attention of Dr. Roach, he quickly

agreed that we would have to re-classify what Conrad saw as an unknown.

Hynek in Christian Science Monitor

The April 22 edition of the *Christian Science Monitor* carried an article by Dr. J. Allen Hynek, Head of the Astronomy Department at Northwestern University and former Scientific Consultant to the Air Force's now defunct Project Bluebook.

Dr. Hynek wrote: "It is quite true that a UFO report often violates established laws of physics. A craft possessing any considerable mass simply cannot, because of its inertia, accelerate to very high speeds in a matter of seconds without the application of unheard-of power and the production of great noise.

"Investigators are faced, then, with at least three alternatives: (1) The witnesses suffered a major delusion; (2) an actual craft was present but answering to a higher order of physical laws than are known to our physical scientists; (3) no *material* object was present, but there was something there that gave all the impressions of being physically real and that could affect people, animals and inanimate objects. The first and third are not equivalent because a delusion doesn't scare horses, cattle, and dogs, nor does it stop cars or interfere with radios and television sets. Physical scientists reject the second alternative outright, conveniently forgetting that less than a hundred years ago they would also have ruled out categorically the possibility of nuclear energy, television, and space flight."

Later, Dr. Hynek commented on the future of UFO research: "Persons with true scientific curiosity will watch with interest the coming post-Condon and post-Blue Book years. Will 'incredible tales told by credible people' cease, now that the verdict has been handed down (by Condon—ed.), or will some pilots and other people in highly responsible positions continue to have UFO experiences? If they do, how will the public be informed, now that there is no official manner for reporting? APRO and NICAP remain, and the writer offers his offices for the receipt of UFO reports for which there are at least two witnesses.

"Study of the phenomenon will go on despite the ridicule barrier. It is unlikely, however, that government agencies can provide funding for such

(See Hynek — Page Four)

Hynek —*(Continued from Page Three)*

studies in the light of the *Condon Report* and the Air Force action. A serious, quiet, continuing investigation, sheltered from the glare of publicity and supported by private or foundation funds, is the likely answer. It should be conducted by dedicated physical and behavioral scientists who meet the requirements for scientists once set down by the famous physicist Schroedinger, father of quantum mechanics, who said, "The first requirement of a scientist is that he be curious; he must be capable of being astonished and eager to find out."

New Forms Needed

In the vast year the APRO staff has been devoting much of their time to re-vamping and stream-lining office procedures. With the mailing of membership cards at the end of April this series of changes was completed.

However, Field Investigators badly need a standard investigation procedure manual and the APRO Report Form is in need of a change and expansion. The only delay involved in producing the FI manual and the Report Form is the current strained condition of the budget. Like other organizations, APRO suffered from the apathy which followed the *Condon Report* and only through cutting costs to the bone have we survived. The situation has now stabilized itself, but in order to be prepared for future UFO activity, the FI manual and the new Report Form must be produced.

Many members have in the past expressed willingness to contribute to the organization above and beyond their dues. We hope that those of you who are interested in the future of APRO and the UFO Research Field will respond to this plea for assistance so that the manual and the report forms can be printed as soon as possible.

Those who donate should stipulate that the contribution is a donation so that a proper receipt can be issued for income tax purposes.

RENEW NOW

Members \$5.00
Subscriptions \$7.00
 per year

Power Failures (PF's) Vs. Unidentified Flying Objects (UFO's)

By**PAUL J. SMITH**

Mr. Smith, an Information Systems Consultant, is an APRO Field Investigator in the Los Angeles area.

INTRODUCTION:

It has been inferred for quite some time now that there may exist a connection between UFO's and power interruptions (PI's) as labeled by the FPC (Federal Power Commission), or PF's as used in this article. The intent here is not to answer the \$64 question as to "What are UFO's?" but to demonstrate to the reader in a graphical and statistical manner that a strong correlation does appear to rear its head where PF's are concerned. The reader should be reminded that the power failure data as used here applies to the USA only, and its recently acquired states, Hawaii and Alaska.

FPC — REPORT No. 331:

The FPC reports on power disturbances involving loads of 25,000 KW or more and lasting for 15 minutes or longer in duration which involve voltages of 69 KV and above. Vol. 1 of the report to the president contains the resumé of power failures between 1954-1966. Quarterly reports for the years 1967-1969 were also used in preparing this article. The report itself was issued on December 20, 1966, and summarizes in Appendix E the larger power interruptions for the years 1954 to 1966. A total of 148 power failures with sufficient importance to gain publicity was reported. Some of these outages involved transmission network instability and separation; others local in nature affected load areas served radially from the network. The total outages are shown in matrix form in Figure 3 for the years 1954-1969.

PF's AND UFO CORRELATION:

Using the data from Figure 3 and that from Figure 9 one can plot two curves as shown in Figure 1. The dotted curve graphically depicts the total power failures for the years 1954-1969. The black solid line graphically depicts the UFO sighting reports for the years 1954-1966. The yearly highs and lows for both PF's

and UFO sightings are extracted from Figure 1 and shown in bar graph form in Figure 2.

Observing the curves in Figure 1, it can be seen that the PF and UFO sighting curves are in phase and track each other from year to year (rising and falling together as if in synchronism). An out of phase condition does however exist for the year of 1956. This discrepancy could probably be resolved if additional UFO sighting reports for that year were obtained. Further analysis of the PF data for that year might also remove the differences.

PF — GEOGRAPHIC BREAKOUT:

The yearly by state PF's highs and lows are shown in Figure 4-8. Total PF's are shown at the extreme right (circled). Each state's PF's are recorded numerically as shown in descending order. (To the left for highs and to the right for the lows). Individual month's highs and lows are also tabulated. A geographic Power Failure Summary (1954-1969) and corresponding percentages are shown in Figures 8A-8B.

PF WEEKLY BREAKOUT:

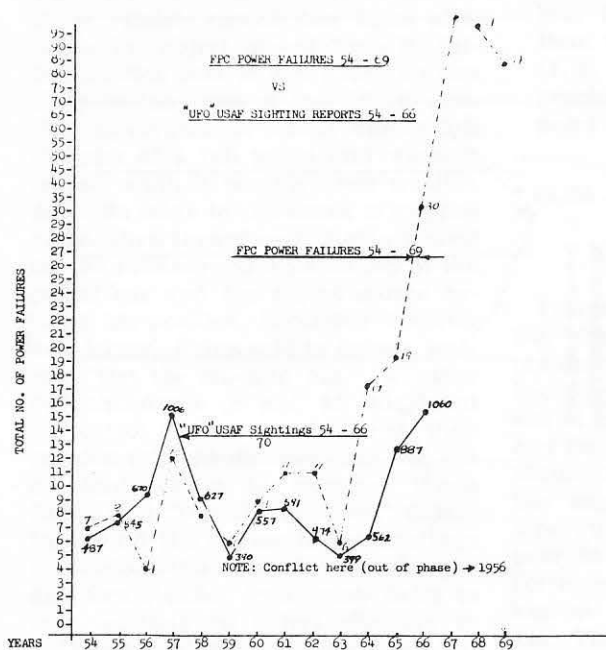
The total number of power failures weekly for the years 1954-1969 are shown in matrix form (Figure 3A). Figure 3B shows a group of the High and Low days. A total of 409 power failures are listed. Figure 3, FPC Power Failure Matrix shows 423. The difference of 14 days were not shown in Appendix E of FPC Report. Those days are listed as follows:

1954 — 1 day
 1955 — 6 days
 1956 — 1 day
 1957 — 2 days
 1958 — 2 days
 1962 — 1 day
 1963 — 1 day
 —
 14 days

The percentage of failures listed for each day are as follows:

| Number of Daily PF's | | Percentages* |
|-------------------------|-----|--------------|
| Thursday | 76 | 18.58 |
| Wednesday | 72 | 17.60 |
| Monday | 64 | 15.65 |
| Friday | 63 | 15.40 |
| Tuesday | 56 | 13.68 |
| Sunday | 48 | 11.74 |
| Saturday | 30 | 7.33 |
| Totals | 409 | 100% |

*Rounded up



CONCLUSIONS:

Considerable caution should be the order of the day in reading too much from the initial curves (Figure 1). One such caution is to remember that these curves were generated from raw input data. In particular where the PF data is concerned. The FPC report lists the causes as probable. Much more massaging of this data is necessary before solid meaningful conclusions can be drawn. For example, if the probable cause turns out to be "tree felled on power line" or "crop dusting plane crashed into power line," then naturally these types of failures should no longer remain in the probable cause list and must necessarily be removed from the PF matrix Figure 3. More importantly this removal would seriously jeopardize the shape of the PF curve in Figure 1. Additional work by other researchers might prove fruitful if they were to construct a UFO sighting matrix similar to the PF matrix data shown in Figures 4-8. The data could then be correlated looking for PF and UFO sighting clusters or groupings. If something looks interesting then extracting to the next level (city, day, hour) etc. would probably prove worthwhile.

UFO - USAF PROJECT BLUEBOOK SIGHTINGS

1954 - 1966

| YEARS | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 |
|-------|-----|----|----|------|----|-----|----|-----|----|-----|----|-----|------|
| HIGHS | | | | 1000 | | | | 591 | | | | 887 | 1060 |
| LOWS | 487 | | | | | 390 | | | | 399 | | | |

S.R. - Sighting Reports (total)

FPC POWER FAILURES

1954 - 1966

| YEARS | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| HIGHS | | | | 12 | | | | 11 | | | | 19 | 30 |
| LOWS | 7 | | 4 | | | 6 | | | | 6 | | | |

P.F. Power Failures (total)

SUMMARY -

UFO's HIGHS - 57, 61, 65 and 66

LOWS - 54, 59 and 63.

PF's - HIGHS - 57, 61, 65 and 66

LOWS - 54, 56, 59, and 63

FIGURE 2

U.S.A.

FPC - POWER FAILURES MATRIX 1954 - 1969

| YEARS | JAN. | FEB. | MAR. | APR. | MAY. | JUN. | JULY. | AUG. | SEPT. | OCT. | NOV. | DEC. | TOTALS |
|--------|------|------|------|------|------|------|-------|------|-------|------|------|------|--------|
| 1954 | 1 | | | | | | | | 1 | 3 | | 1 | 7 |
| 1955 | | | 2 | | 1 | 1 | 1 | 2 | | 1 | | | 8 |
| 1956 | | | | | | 1 | | | 1 | 1 | | 1 | 4 |
| 1957 | 4 | | 1 | 1 | 2 | 2 | | 1 | | 1 | | | 12 |
| 1958 | | | 1 | | | 3 | 2 | | 1 | | | 1 | 8 |
| 1959 | 4 | | | | | | | 1 | | | | 1 | 6 |
| 1960 | 1 | | 2 | 1 | 2 | 1 | | | 2 | | | | 9 |
| 1961 | | | 1 | | | 3 | 2 | 2 | 2 | | 1 | | 11 |
| 1962 | | | 2 | | | 1 | | 4 | | 3 | | 1 | 11 |
| 1963 | | | 1 | | | | 3 | 1 | | | | 1 | 6 |
| 1964 | | 1 | 2 | 3 | 1 | | | 3 | 1 | 1 | 2 | 3 | 17 |
| 1965 | 3 | 1 | | 5 | 1 | 2 | | 1 | 2 | | 2 | 2 | 19 |
| 1966 | 2 | | 1 | 1 | 2 | 2 | 11 | 1 | | | 6 | 4 | 30 |
| 1967 | 7 | 12 | 14 | 5 | 10 | 8 | 11 | 11 | 3 | 3 | 3 | 10 | 97 |
| 1968 | 7 | 11 | 7 | 6 | 4 | 12 | 12 | 12 | 4 | 3 | 7 | 9 | 94 |
| 1969 | 9 | 9 | 6 | 7 | 5 | 4 | 13 | 8 | 12 | 2 | 5 | 4 | 84 |
| 1970 | | | | | | | | | | | | | |
| 1971 | | | | | | | | | | | | | |
| 1972 | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| 1974 | | | | | | | | | | | | | |
| 1975 | | | | | | | | | | | | | |
| TOTALS | 38 | 34 | 40 | 29 | 28 | 43 | 53 | 47 | 29 | 18 | 26 | 38 | 423 |

FIGURE 3

U.S.A.

POWER FAILURES WEEKLY 1954 - 1969

| YEAR | SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | TOTALS |
|--------|--------|--------|---------|-----------|----------|--------|----------|--------|
| 1954 | 2 | | 1 | | | 1 | 2 | 6* |
| 1955 | | | | 1 | 1 | | | 2* |
| 1956 | | 1 | | 1 | | 1 | | 3* |
| 1957 | 1 | 2 | 1 | 1 | 4 | 1 | | 10* |
| 1958 | | | 2 | 3 | 1 | | | 6* |
| 1959 | 2 | | | 1 | 2 | 1 | | 6 |
| 1960 | 1 | 1 | 1 | 2 | 3 | 1 | | 9 |
| 1961 | | 3 | 2 | 1 | 3 | 2 | | 11 |
| 1962 | 2 | 4 | 1 | | | 3 | | 10* |
| 1963 | 1 | | 1 | 1 | 1 | 1 | | 5* |
| 1964 | 1 | 3 | 2 | 2 | 3 | 3 | 3 | 17 |
| 1965 | 3 | 2 | 3 | 3 | 6 | 1 | 1 | 19 |
| 1966 | 1 | 7 | 6 | 5 | 6 | 4 | 1 | 30 |
| 1967 | 9 | 19 | 10 | 16 | 14 | 19 | 8 | 97 |
| 1968 | 7 | 16 | 14 | 22 | 19 | 12 | 10 | 94 |
| 1969 | 18 | 12 | 12 | 11 | 13 | 13 | 5 | 84 |
| TOTALS | 48 | 64 | 56 | 72 | 76 | 63 | 30 | 409 |

FIGURE 3A

* INCOMPLETE

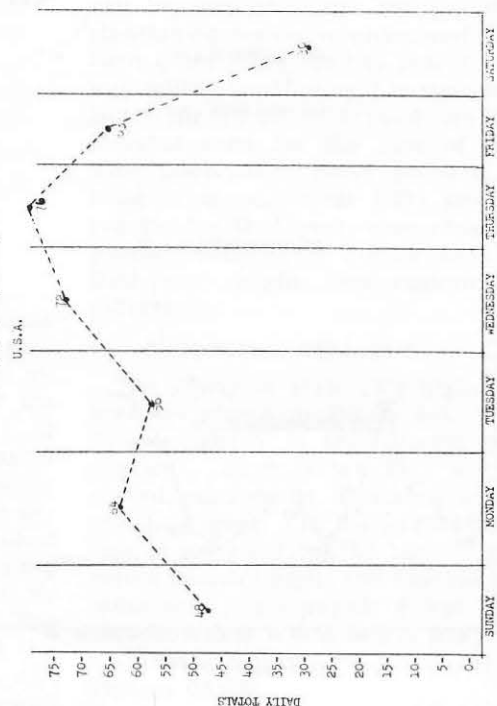
POWER FAILURES 1954 - 1969
WEEKLY (Day by Day Totals)

FIGURE 3B

FPC POWER FAILURES

WEEKLY

1954 - 1969

| WEEKLY | SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--------|--------|--------|---------|-----------|----------|--------|----------|
| HIGHS | | 64 | | 72 | 76 | 63 | |
| LOWS | 48 | | 56 | | | | 30 |

DAILY TOTALS

SUMMARY -

HIGHS - Thursday, Wednesday, Monday and Friday

LOWS - Tuesday, Sunday and Saturday.

FIGURE 3C

GEOGRAPHIC BREAKOUT

POWER FAILURES (PF's)

1954 - 1957

U.S.A.

| YEAR | STATES | | | | MONTHS | | | | | | | | TOTAL PF's |
|------|--------|----------|---------------|------|------------|------|------|-------|------|------------|--|--|------------|
| | P.F. | HIGH | LOW | P.F. | NO. REPORT | HIGH | P.F. | LOW | P.F. | NO. REPORT | | | |
| 1954 | 2 | Ohio | Massachusetts | 1 | A | Oct. | 3 | | 1 | A | | | 7 |
| | 2 | N. East | | | L | | | | 1 | L | | | |
| | 2 | Illinois | | | L | | | | 1 | L | | | |
| | | | | | O | | | | | O | | | 8 |
| | | | | | T | | | | | T | | | |
| | | | | | H | | | | | H | | | |
| | | | | | E | | | | | E | | | 4 |
| | | | | | R | | | | | R | | | |
| | | | | | S | | | | | S | | | |
| 1955 | 3 | N. East | Illinois | 1 | A | Mar. | 2 | May | 1 | A | | | 12 |
| | | Coast | Indiana | 1 | L | Aug. | | June | 1 | L | | | |
| | | | New Jersey | 1 | L | | | JULY | 1 | L | | | |
| | | | New York | 1 | L | | | OCT | 1 | L | | | 4 |
| | | | | | O | | | | | O | | | |
| | | | | | T | | | | | T | | | 12 |
| | | | | | H | | | | | H | | | |
| | | | | | E | | | | | E | | | |
| | | | | | R | | | | | R | | | 4 |
| | | | | | S | | | | | S | | | |
| 1956 | | N. A. | Wisconsin | 1 | A | | | June | 1 | A | | | 4 |
| | | | Ohio | 1 | L | | | Sept. | 1 | L | | | |
| | | | N. York | 1 | L | | | Oct. | 1 | L | | | |
| | | | New Jersey | 1 | L | | | Dec. | 1 | L | | | 12 |
| | | | | | O | | | | | O | | | |
| | | | | | T | | | | | T | | | 12 |
| | | | | | H | | | | | H | | | |
| | | | | | E | | | | | E | | | 12 |
| | | | | | R | | | | | R | | | |
| | | | | | S | | | | | S | | | 12 |
| 1957 | 3 | New York | Indiana | 1 | A | Jan | 4 | Mar. | 1 | A | | | |
| | 2 | Kansas | Arkansas | 1 | L | May | 2 | Apr. | 1 | L | | | |
| | 2 | Texas | Tennessee | 1 | L | June | 2 | Aug. | 1 | L | | | |
| | | | Wash. D.C. | 1 | L | | | Oct. | 1 | L | | | 12 |
| | | | Minnesota | 1 | O | | | | | O | | | |
| | | | | | T | | | | | T | | | |
| | | | | | H | | | | | H | | | 12 |
| | | | | | E | | | | | E | | | |
| | | | | | R | | | | | R | | | |
| | | | | | S | | | | | S | | | 12 |

* PF - Power Failure

FIGURE 4

POWER FAILURE:

158 - 152

| AR | STATES | | MONTHS | | | | | | TOTAL FF's | | |
|------|-------------|----------------------------|--|---------------------------------|---|------------------------------|------------------|-----------------------|---------------|---|--------|
| | P.F. | HIGH | LOW | P.F. | REPORT | HIGH | P.F. | LOW | | P.F. | REPORT |
| 1958 | | N.A. | N-East Coast Minnesota Kansas Louisiana New Jersey S. Carolina N. Carolina New Mexico | 1 1 1 1 1 1 1 | A L L O T H E R S | June July | 3 2 | Mar. Sept. Dec. | 1 1 1 | A L L O T H E R S | (8) |
| 1959 | 2 | New York | Washington Texas New Jersey Missouri | 1 1 1 1 | A L L O T H E R S | Jan. | 4 | Aug. Dec. | 1 1 | A L L O T H E R S | (6) |
| 1960 | 2 | Oklahoma | New Jersey Louisiana Tennessee Hawaii Ohio New York East Coast | 1 1 1 1 1 1 1 | A L L O T H E R S | Mar. May Sept. | 2 2 2 | Jan. Apr. June | 1 1 1 | A L L O T H E R S | (9) |
| 1961 | 3 3 2 | Idaho New York Texas | Connecticut California Ohio | 1 1 1 | A L L O T H E R S | June July Aug. SEPT | 3 2 2 2 | Mar. Nov. | 1 1 | A L L O T H E R S | (11) |

FIGURE 5

POWER FAILURES

1902 - 1905

| YEAR | STATES | | | | MONTHS | | | | TOTAL FF's |
|------|--------|----------|---------------|--------------|----------------------------|------|------|----------------------------|---------------|
| | P.F. | HIGH | LOW | NO REPORT | P.F. | HIGH | LOW | NO REPORT | |
| 1962 | 3 | New York | New Jersey | 1 | A | Aug. | 1 | A | (11) |
| | 2 | Calif. | Iowa | 1 | L | Oct. | 3 | L | |
| | 2 | Oregon | Ohio | 1 | L | Mar. | 2 | L | |
| | | | | | O T H E R S | | | O T H E R S | |
| 1963 | 2 | New York | Florida | 1 | A | June | 3 | A | (5) |
| | | | Oklahoma | 1 | L | | | L | |
| | | | Kansas | 1 | L | Mar. | July | 1 | |
| | | | California | 1 | L | Dec. | 1 | L | |
| | | | | | O T H E R S | | | O T H E R S | |
| 1964 | 3 | New York | S.W. Tenn. | 1 | A | Apr. | 3 | A | (17) |
| | 3 | Florida | Alaska | 1 | L | Aug. | 3 | L | |
| | 2 | Texas | New Mexico | 1 | L | Dec. | 3 | L | |
| | | Calif. | Louisiana | 1 | L | Nov. | Sept | 1 | |
| | | | Washington | 1 | L | Mar. | Oct. | 1 | |
| | | | | | O T H E R S | | | O T H E R S | |
| 1965 | 3 | Illinois | Indiana | 1 | A | Apr. | 5 | A | (19) |
| | 3 | Iowa | Minnesota | 1 | L | Jan | 3 | L | |
| | 2 | Texas | Arizona | 1 | L | Jun | 2 | L | |
| | 2 | Penna. | Colorado | 1 | L | Sept | 2 | L | |
| | | Wash. | Louisiana | 1 | O | Nov. | 2 | O | |
| | | | Florida | 1 | T | Dec. | 2 | H | |
| | | | N.East (U.S.) | 1 | H | | | E | |
| | | | | | R S | | | R S | |

FIGURE 6

POWER FAILURES

1966 - 1967

| YEAR | STATES | | | | MONTHS | | | | TOTAL PP's | |
|------|-----------|------------|-------------|------|--------------|--------|------|------|---------------|------|
| | P.F. | HIGH | LOW | P.F. | NO REPORT | HIGH | P.F. | LOW | | P.F. |
| 1966 | 5 | Calif. | Mississippi | 1 | A | July** | 11 | 1 | A | |
| | 4 | Texas | Alaska | 1 | L | Nov. | 6 | Apr. | 1 | L |
| | 3 | Georgia | Florida | 1 | L | Dec. | 4 | Aug. | 1 | L |
| | 2 | W. Vir. | Tennessee | 1 | | Jan | 2 | | | O |
| | 2 | Virginia | Nebraska | 1 | O | May | 2 | | | T |
| | 2 | Missouri | Oklahoma | 1 | T | June | 2 | | | H |
| | | Wash. | New Mexico | 1 | H | | | | | E |
| | | | Nevada | 1 | E | | | | | R |
| | | | Illinois | 1 | R | | | | | S |
| | | | Arkansas | 1 | S | | | | | |
| 1967 | 10 | Texas | Montana | 1 | | Mar | 14 | Sept | 3 | |
| | 8 | Calif. | Wyoming | 1 | A | Feb. | 12 | Oct. | 3 | A |
| | 7 | Wash. | Iowa | 1 | L | July | 11 | Nov. | 3 | L |
| | 6 | Utah | Louisiana | 1 | L | Aug. | 11 | | | L |
| | 5 | Idaho | Wisconsin | 1 | | May | 10 | | | |
| | 5 | Kentucky | Michigan | 1 | O | Dec. | 10 | | | O |
| | 4 | Ohio | Indiana | 1 | T | Jun | 8 | | | T |
| | 4 | Penn. | Florida | 1 | H | Jan | 7 | | | H |
| | 3 | Oregon | Virginia | 1 | E | Apr | 5 | | | E |
| | 3 | Ariz. | Connecticut | 1 | R | | | | | R |
| | 3 | S.Dak. | N. Jersey | 1 | S | | | | | S |
| | 3 | Illinois | Maryland | 1 | | | | | | |
| | 3 | Georgia | | | | | | | | |
| | 3 | Mass. | | | | | | | | |
| | 2 | New Mexico | | | | | | | | |
| 2 | Missouri | | | | | | | | | |
| 2 | Tenn. | | | | | | | | | |
| 2 | Alabama | | | | | | | | | |
| 2 | N. Carol. | | | | | | | | | |
| 2 | S. Carol. | | | | | | | | | |
| 2 | Maine | | | | | | | | | |
| 2 | Alaska | | | | | | | | | |

•• Very High

FIGURE 7

POWER FAILURES

1968-1969

| YEAR | P.F.F. | STATES | | MONTHS | | | | | | | | TOTAL P.F.F.'S |
|------|--------|---------|-----------|--------|--------------|------|--------|------|--------|--------------|------|-------------------|
| | | HIGH | LOW | P.F.F. | NO REPORT | HIGH | P.F.F. | LOW | P.F.F. | NO REPORT | | |
| 1968 | 7 | Texas | Wisconsin | 2 | | Jun. | 12 | May | 4 | | (94) | |
| | 7 | Ala. | Mass. | 2 | A | Jul. | 12 | Sept | 4 | A | | |
| | 7 | Georgia | S.Dak. | 2 | L | Aug. | 12 | Oct. | 3 | L | | |
| | 5 | Ohio | Ind. | 2 | L | Feb. | 11 | | | L | | |
| | 5 | N.Car. | Ariz. | 2 | O | Dec. | 9 | | | | | |
| | 5 | Calif. | Utah | 2 | O | Jan | 7 | | | | | |
| | 4 | Tenn. | S.Car. | 2 | T | Mar. | 7 | | | O | | |
| | 4 | Wash. | N.Y. | 2 | H | Nov. | 7 | | | T | | |
| | 4 | Iowa | Okl. | 1 | E | Apr. | 6 | | | H | | |
| | 3 | Idaho | Miss. | 1 | R | | | | | E | | |
| | 3 | Ill. | R.I. | 1 | S | | | | | R | | |
| | 3 | Ore. | Nebr. | 1 | | | | | | S | | |
| | 3 | N.Mex. | Fla. | 1 | | | | | | | | |
| | 3 | La. | Kan. | 1 | | | | | | | | |
| 1969 | 8 | Wash. | Minn. | 1 | | July | 13 | Jan | 9 | | (84) | |
| | 8 | N.Car. | Iowa | 1 | A | | | | | A | | |
| | 6 | Fla. | Oregon | 1 | L | Sept | 12 | Feb | 9 | L | | |
| | 5 | Calif. | Wyo | 1 | L | | | Aug | 8 | L | | |
| | 4 | Ala. | Maryland | 1 | | | | Apr | 7 | | | |
| | 4 | Texas | Mont. | 1 | | | | Mar | 6 | | | |
| | 4 | Ohio | Kent. | 1 | O | | | May | 5 | O | | |
| | 4 | Mich | | | T | | | Nov | 5 | T | | |
| | 3 | S Car. | Ind. | 1 | H | | | Jun | 4 | H | | |
| | 3 | R.I. | La. | 1 | E | | | Dec | 4 | E | | |
| | 3 | Ga. | N.Dak. | 1 | R | | | | | R | | |
| | 3 | Wisc. | N.J. | 1 | S | | | Oct | 2 | S | | |
| | 2 | S.Dak. | Utah | 1 | | | | | | | | |
| | 2 | Tenn. | Vermont | 1 | | | | | | | | |
| 2 | Ariz. | | | | | | | | | | | |
| 2 | Nevada | Hawaii | 1 | | | | | | | | | |
| 2 | Miss. | Alaska | 1 | | | | | | | | | |
| 2 | N. Mex | # | | | | | | | | | | |
| 2 | | Conn. | | | | | | | | | | |

FIGURE 8

GEOGRAPHIC SUMMARY
POWER FAILURES 1954 - 1969

| STATE | POWER FAILURES (PF'S) | PERCENT OF TOTAL (%) |
|----------------|--------------------------|-------------------------|
| Texas | 35 | 8.3 |
| California | 29 | 6.9 |
| Washington | 26 | 6.0 |
| New York | 21 | 5.0 |
| Ohio | 19 | 4.5 |
| Georgia | 16 | 4.0 |
| North Carolina | 16 | 4.0 |
| Florida | 14 | 3.3 |
| Alabama | 13 | 3.1 |
| Illinois | 13 | 3.1 |
| Tennessee | 12 | 2.8 |
| Idaho | 11 | 2.6 |
| New Mexico | 10 | 2.4 |
| Iowa | 10 | 2.4 |
| Louisiana | 9 | 2.1 |
| Oregon | 9 | 2.1 |
| Pennsylvania | 9 | 2.1 |
| Utah | 9 | 2.1 |
| New Jersey | 9 | 2.1 |
| Arizona | 8 | 2.0 |
| Indiana | 8 | 2.0 |
| South Carolina | 8 | 2.0 |
| W. East Coast | 8 | 2.0 |
| Oklahoma | 7 | 1.7 |
| South Dakota | 7 | 1.7 |
| Wisconsin | 7 | 1.7 |
| Kentucky | 6 | 1.4 |
| Massachusetts | 6 | 1.4 |
| Michigan | 6 | 1.4 |
| Missouri | 6 | 1.4 |
| Virginia | 6 | 1.4 |
| Alaska | 5 | 1.2 |
| Kansas | 5 | 1.2 |
| Connecticut | 4 | 1.0 |
| Minnesota | 4 | 1.0 |
| Mississippi | 4 | 1.0 |
| Rhode Island | 4 | 1.0 |
| Nevada | 3 | .7 |
| Wyoming | 3 | .7 |
| Arkansas | 2 | .4 |
| Hawaii | 2 | .4 |
| Maine | 2 | .4 |
| Maryland | 2 | .4 |
| Montana | 2 | .4 |
| Nebraska | 2 | .4 |
| West Virginia | 2 | .4 |
| Colorado | 1 | .2 |

FIGURE 8A

GEOGRAPHIC SUMMARY
POWER FAILURES 1954 - 1969 (Continued)

| STATE | POWER FAILURES (PF'S) | PERCENT OF TOTAL (%) |
|-------------------|--------------------------|-------------------------|
| North Dakota | 1 | .2 |
| Vermont | 1 | .2 |
| Washington (D.C.) | 1 | .2 |
| Delaware | 0 | 0 |
| New Hampshire | 0 | 0 |
| TOTALS | 52*** | 100* |

*** W. East Coast and Washington D.C. account for difference

** Individual states not given

* Rounded

NOTE: Over 50% of all PF's occurred in 11 states or 22% of entire U.S.A.

FIGURE 8B

NOTE: Sighting Totals
Divided by 70
for Graphing.

PROJECT BLUEBOOK
USAF UFO SIGHTINGS 1947 - 1966
U.S.A.

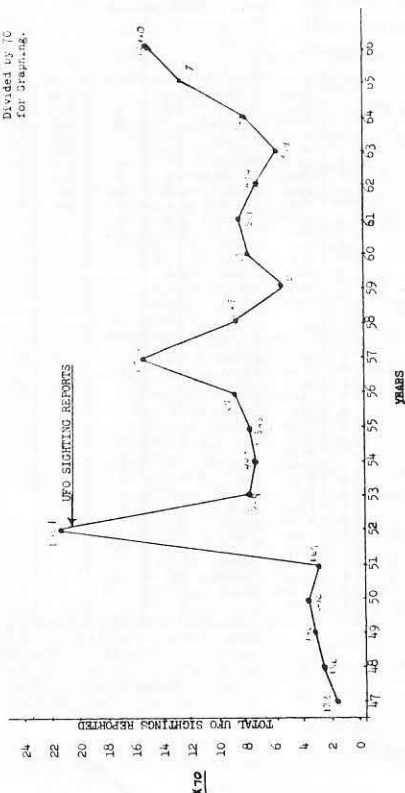


FIGURE 9

USAF UFO SIGHTINGS
PROJECT BLUEBOOK - 1947 - 1966

| YEARLY | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 |
|--------|-----|----|----|----|------|----|----|----|------|----|----|----|-----|-----|----|----|----|-----|----|----------|
| HIGHS | | | | | 1501 | | | | 1006 | | | | 591 | | | | | | | 587 0600 |
| LOWS | 122 | | | | 169 | | | | | | | | | 330 | | | | 355 | | |

U. S. A.

UFO's
Sightings
HIGHS: 1952, 1957, 1961, 1965 and 1966
LOWS: 1947, 1951, 1954, 1959 and 1963

FIGURE 10

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85712, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

TUCSON, ARIZONA — MAY-JUNE, 1970

MASS SIGHTING IN NEW ZEALAND

Report from Vermont

Several clippings forwarded to APRO Headquarters by members in Eastern U.S. deal with reports of lights moving back and forth across the sky above Winooski, Vermont in the early morning hours of 28 May 1970. They were reported by a General Electric employee and two police officers. A U.S. Weather Bureau official at Burlington International Airport suggested the lights may have resulted from the reflection of a high intensity light used to determine cloud ceiling which had been inadvertently left on overnight.

Mr. D. Henry, APRO Field Investigator in Montreal, Canada, entered the area at the request of Headquarters Tucson for a follow-up investigation but was not able to determine the identity of the lights. State troopers, however, claim that their bloodhounds howled during the entire period of 1½ hours while the object was observed.

During the course of his investigation Mr. Henry interviewed a local policeman who claimed that at about the end of April (he could not recall the exact date) he came upon a UFO sporting white lights on a red body which hovered over the intersection of Route 89 and 2A, southeast of Burlington. The observation lasted about five minutes after which the object's lights went off and it drifted over the trees and out of sight, exhibiting the "falling leaf" motion. The officer said that it appeared as large as a basketball held at arm's length. The time was 4 a.m.

BULLETIN RATES

Membership including Bulletin

U.S., Canada and Mexico \$5.00 yr.

All Other Countries \$6.00 yr.

Subscription to Bulletin only

U.S., Canada and Mexico \$7.00 yr.

All Other Countries \$8.00 yr.

The Apache Junction Physical Evidence Case

By DR. WALTER W. WALKER

Dr. Walker is an Associate Professor of Metallurgical Engineering at the University of Arizona, Tucson, and Consultant to APRO in Metallurgy.

(The following report-abstract is in connection with the physical evidence case reported on the front page of the January-February, 1970, Bulletin.)

In February, 1970 Mr. and Mrs. Lorenzen of APRO investigated a case in the vicinity of Phoenix, Arizona which involved possible UFO residue. Subsequently the artifact in question (which was suspected of being UFO physical evidence), was given to the writer for a materials analysis. This artifact was subjected to a thorough materigraphic analysis involving the separate, nondestructive techniques of transmission radiography, emission spectroscopy and spectrography, metallography and physical measurements.

The artifact is a small, cylindrical object approximately 1-1/32 inch long. The artifact consists of a central core in the form of a metallic wire, approximately 0.024 inches in diameter. The central wire was surrounded by a fibrous, organic-base insulation. Outside the insulation layer is a concentric, cylindrical sheath of some type of polycrystalline ceramic material. The outside diameter of the object varied from 0.133 to 0.136 inches. Initial examination showed that the artifact was a manufactured object. Its actual nature and use could not be determined, however.

Further study showed that:

- The object was strongly magnetic but did not exhibit fluorescence, phosphorescence or unusual radioactivity.
- The central core was an iron-manganese alloy.
- The nature of the fibrous in-

(See Apache — Page Four)

Norman Alford, APRO's Representative for New Zealand has furnished the following results of his investigation of a sighting which took place on the 7th of May 1970:

Headmaster W. Billing and several of the teachers at Richmond School, Maraenui, as well as about 400 children watched a strange sky object for about 20 minutes from about 2:03 to 2:23 p.m. Billing's attention was first drawn to the object by the unusual quiet of the usually noisy children. Billing said the children had stopped playing and were watching in awe and fascination.

The day was "beautifully warm and sunny," Mr. A. Coveny, a teacher, told Mr. Alford. The object appeared in the south as an opaque "hole" in the blue sky, low on the horizon and presented an elongated or oval appearance. Then it appeared to "gather itself together" and moved toward the school (which is located near Napier) and stopped when "just below the sun." At this time it appeared as a "huge wingless plane" with the sun glistening on it. Billing and Coveny guessed that the object was hovering between Westshore and Tongaio, and they said they watched a plane landing at Napier Aerodrome while the object was in clear view. "There was definitely no comparison between the two," Billing said.

After hovering for a period of about 10 minutes, the strange object began to move away toward the northeast. It then presented the appearance of a round ball, the center of which had a "transparent-like sheen." As it moved away it flattened out again and moved in a straight line until it appeared as a bright star. Then it seemingly lighted up again, "like a bright blue planet," Billing said, and faded away before it moved straight away at high speed.

Billing ruled out a balloon as a possible explanation because of the object's change of shape from round to oval and vice versa, which indicated a round flat configuration. He also

(See N. Z. — Page Four)

THE A.P.R.O. BULLETIN

Published by

THE AERIAL PHENOMENA
RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road
Tucson, Arizona 85712

Phone: 602-793-1825 and 602-326-0059

Copyright 1970

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

John Hopf, Photo-analyst

A.P.R.O. STAFF

International Director _____ L. J. Lorenzen
Assistant Director _____ Richard Greenwell
Secretary _____ Coral Lorenzen

CONSULTANTS

| | |
|---------------------|------------------------------|
| Aeronautics | Rayford R. Sanders, M.S.M.E. |
| Astronautics | John F. Schuessler, B.S.M.E. |
| Astronomy | Leo Vern Standeford, Ph.D. |
| Astrophysics | Richard C. Henry, Ph.D. |
| Anatomy | Kenneth V. Anderson, Ph.D. |
| Biology | Robert S. Mellor, Ph.D. |
| Biophysics | John C. Munday, Ph.D. |
| Biochemistry | Vladimir Stefanovich, Ph.D. |
| Chemistry | Allen R. Utke, Ph.D. |
| Computer Technology | Vlastimil Vysin, Ph.D. |
| Engineering | James A. Harder, Ph.D. |
| Exobiology | Frank B. Salisbury, Ph.D. |
| Geology | Philip Seff, Ph.D. |
| Linguistics | P. M. H. Edwards, Ph.D. |
| Metallurgy | Walter W. Walker, Ph.D. |
| Mathematics | G. K. Ginnings, Ed.D. |
| Medicine | Benjamin Sawyer, M.D. |
| Metallurgy | Walter W. Walker, Ph.D. |
| Optics | B. Roy Frieden, Ph.D. |
| Physics | Horace C. Dudley, Ph.D. |
| Physics | Rene J. Hardy, Ph.D. |
| Physiology | Harold A. Cahn, Ph.D. |
| Psychiatry | L. Gerald Laufer, M.D. |
| Psychology | R. Leo Sprinkle, Ph.D. |
| Religion | Robert S. Ellwood, Ph.D. |
| Science Education | A. Henry Swann, Ed.D. |
| Seismology | John S. Derr, Ph.D. |

REPRESENTATIVES

| | |
|---------------------|-------------------------|
| Argentina | Guillermo Gainza Paz |
| Australia | Peter E. Norris |
| Belgium | Edgar Simons |
| Bolivia | Fernando Hinojosa V. |
| Brazil | Prof. Flavio Pereira |
| Britain | Anthony Pace |
| Chile | Pablo Petrowitsch |
| Colombia | John Simhon |
| Costa Rica | Rodolfo Acosta S. |
| Cuba | Oscar Reyes |
| Czechoslovakia | Jan Bartos |
| Denmark | Erling Jensen |
| Dominican Republic | Guarionex Flores L. |
| Ecuador | Col. Raul Gonzalez A. |
| Finland | Kalevi Hietanen |
| France | Aime Michel |
| Germany | Capt. William B. Nash |
| Greece | George N. Balanos |
| Greenland | Joseph March |
| Guatemala | Eduardo Mendoza P. |
| Holland | D. J. H. Dreux |
| Hong Kong | Alex Pezarro |
| Ireland | Martin Feeney |
| Italy | Roberto Pinotti |
| Japan | Jun'ichi Takemashi |
| Lebanon | Menthir El Khatib |
| Malta | Michael A. Saliba |
| Mexico | Roberto Martin |
| New Guinea | Rev. N. C. G. Crutwell |
| New Zealand | Norman W. Alford |
| Norway | Finn Einar Myhre |
| Peru | Ermanno Maniero |
| Philippine Republic | Col. Aderito A. de Leon |
| Puerto Rico | Sebastian Robiou L. |
| Rumania | Tiberius A. Topor |
| Sierra Leone | Bernard J. Dodge |
| Singapore | Yip Mien Chun |
| Spain | Antonio Ribera |
| Sweden | K. Gosta Rehn |
| Switzerland | Dr. Kurt Kauffman |
| Tasmania | William K. Roberts |
| Trinidad | Eurico Jardim |
| Uruguay | Walter Fernandez L. |
| Venezuela | Askold Ladonko |
| Vietnam | Paul G. Nichols |

Newswires, newspapers, radio and television stations may quote up to 250 words from this publication, provided that the Aerial Phenomena Research

Organization, Inc. (or APRO), Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.

NOTE:

Although it is the policy of APRO to answer all mail, a stamped, self-addressed envelope will both speed replies and maintain a greater proportion of funds for research.

Three New APRO Consultants

Three members, previously Field Investigators, have become APRO Consultants in the fields of Seismology, Biophysics and Computer Technology. They are, respectively, Dr. John S. Derr, Dr. John C. Munday and Dr. Vlastimil Vysin.

Dr. Derr received his B.A. in Geology and Physics at Amherst College in 1963 and his M.A. and Ph.D. in Geophysics at the University of California at Berkeley in 1968. He was previously employed by the U.S. Geological Survey and the University of California's Seismographic Station at Berkeley and was a Research Associate in the Department of Earth and Planetary Sciences at MIT from 1968 to 1970. His present position is Research Scientist, Astrogeophysics Section, Space Sciences Dept., Martin Marietta Corp., in Denver, Colorado. The author and co-author of many technical papers (see *Apollo 11 Passive Seismic Experiment in Science*, Jan. 30, 1970), Dr. Derr wrote the article on the AAAS UFO Symposium in the November-December 1969 APRO Bulletin.

Dr. Munday obtained his A.B. in Physics at Cornell University in 1962. His Ph.D. in Biophysics was obtained at the University of Illinois at Urbana in 1968. His employments have been with the Marine Biological Laboratory at Woods Hole, Massachusetts, the Photosynthesis Laboratory at the University of Illinois and the U.S. Air Force Missile Development Center at Holloman AFB, New Mexico, where he developed methods of reentry optical data acquisition and computer reduction. Dr. Munday is currently an Associate Marine Scientist at the Virginia Institute of Marine Science, Gloucester Point, and an Assistant Professor of Marine Science at the University of Virginia.

Dr. Vysin studied in his home country of Czechoslovakia before immigrating to the United States. He was a Candidate of Technical Sciences in Mathematical Machines and obtained the equivalent to a Ph.D. in 1964 from the Czechoslovak Academy of Sciences in Prague.

Now a U.S. citizen and an APRO

member for several years, Dr. Vysin works in system and logic design, advanced memories, in the Advance System and Technology Operation of the General Electric Co., in Phoenix, Arizona.



DR. JOHN S. DERR
Consultant in Seismology



DR. JOHN C. MUNDAY
Consultant in Biophysics

Midwest UFO Conference Success

On the 11th of June Mrs. Lorenzen, Secretary of APRO, Inc., flew to Peoria, Illinois to address the Midwest UFO Conference, sponsored by the Aerial Phenomena Club of Central Illinois (APCCI). She was met at the (See Conference — Page Three)

Conference —

(Continued from Page Two)

Airport by Laird Carter, Ray Watts, Dale Dufelmeier, Rick Reynolds and Mike Morey, who comprise the Executive Committee of APCCI, and who initially extended the invitation. A special thank you goes to these five gentlemen who planned and engineered the Conference and attended to the myriad details which made the Conference a success. Mr. Watts and Mr. Dufelmeier accompanied Mrs. Lorenzen to a number of radio and TV interviews which had been arranged by the committee to publicize the Conference on Friday and which culminated in a telephone interview with UPI Chicago.

At this juncture we thank the APRO members around the United States who arranged for the press wire publicity. Those who obtained clippings pertaining to the Conference are urged to send them to APRO Headquarters so that the scope and effectiveness of the releases can be gauged.

The Conference commenced on Saturday, the 13th at 9:30 a.m. with a welcoming address by Laird Carter, Chairman of the Executive Committee of APCCI, who introduced Walt Andrus. Mr. Andrus introduced the speakers.

The first speaker was Dr. Allen R. Utke, Assistant Professor of Chemistry at Wisconsin State University, Oshkosh, and Consultant in Chemistry to APRO who delivered an informative and interesting address dealing with "UFOs and the Problem of Scientific Evidence."

The second speaker of the morning was Mr. Ted Phillips, APRO Field Investigator from Sedalia, Missouri. Mr. Phillips spoke and showed slides related to burned circles on the ground and "saucer nests." Mr. Phillips has specialized in this phase of UFO Research and his address was an important part of the subject matter discussed.

Luncheon was served at noon in a room near Olin Hall and lovely flower arrangements from the garden of Mrs. Carter, Laird Carter's mother, were displayed on each table.

The afternoon session commenced with an address by John F. Schuessler, Senior Engineer with McDonnell-Douglas at St. Louis. The title of Mr. Schuessler's address was: "The UFO, Just Beyond the State of the Art."

Unfortunately, Mr. Leonard W. Sturm, Electrical Engineer with the

Illinois Power Company, Decatur, Illinois, who was scheduled to speak on "Electromagnetic Effects Associated with UFOs" did not address the Conference although he did attend. Mr. Sturm had just returned from an emergency trip to Florida which was occasioned by a critical illness in his family.

Standing in for Mr. Sturm was Mr. Robert Smulling, professional photographer of Hamilton, Illinois, who delivered a talk dealing with photographic evidence and presented slides depicting photographs taken of UFOs through the years. His presentation was well received by the conference attendees. Mr. Smulling is a Field Investigator for APRO in Illinois.

The concluding address of the afternoon was "UFOs — 1970 — An Up-to-Date Report," delivered by Mrs. Lorenzen, who was introduced by Mr. Robert Achzehner of Villa Park, Illinois. She related to the Conference attendees the current state of UFO research as reflected by APRO's current status. She discussed the Field Investigators' Network which is growing and becoming more effective every day, the number of reports gathered by APRO in 1969, some current reports (including the Napier, N. Z. report, Page 1, this issue) and the progress APRO has made in analyzing and documenting physical evidence. Three physical evidence cases were discussed specifically: the Ubatuba Magnesium (the latest tests and conclusions will be published in the July-August issue of the Bulletin), and the Apache Junction, Arizona and Festus, Missouri artifacts, which are featured elsewhere in this issue.

The evening session commenced at 7:30 p.m. with the address of Dr. J. Allen Hynek, former scientific consultant to the Air Force's Project Bluebook and Head of the Astronomical Department of Northwestern University. He discussed the current state of UFO research and emphasized that future progress will have to result from the efforts of civilian researchers. He also urged specialization in specific areas of UFO Research, such as that of Ted Phillips.

The question and answer period began after Hynek's address and members of the audience addressed Dr. Hynek, Dr. Utke, Mr. Schuessler, Mr. Smulling, Mrs. Lorenzen and Mr. Phillips directly by the use of a roving microphone.

We have not gone into too much detail at this time because of lack of

space. However, Mr. Mike Morey of APCCI taped the entire Conference and these tapes will be available to those wishing to purchase them. See the notice announcing order instructions and cost, elsewhere in this Bulletin.

A printed transcript of the Conference will also be available through APRO and the order instructions and cost will be announced in the July-August issue.

The Midwest UFO Conference was a success and partly because of the support of APRO members. When Mrs. Lorenzen asked for a hand count during the question and answer period, approximately 40 per cent of the audience indicated their affiliation with APRO. Literature given to Conference attendees and the number of new members coming in from the Midwest area indicate that APRO increased its membership substantially in that area.

Two Canadians, a German journalist (stationed in Canada — also an APRO Field Investigator), a group from Sebring, Ohio and another from Cleveland, Ohio and several members from Michigan including Doug Wilson, another Field Investigator, indicate the widespread interest and support. Dr. Horace C. Dudley, of Chicago, APRO's Consultant in Physics, also attended and Mrs. Lorenzen and he were able to converse and coordinate APRO's efforts to study the possible propulsion methods of UFOs.

Also attending was Leif Sedhammar of Sweden who had been directed to the Conference by K. Gosta Rehn, APRO's Swedish Representative. During the course of the three days that Mrs. Lorenzen was in Peoria she had opportunity to confer with Dr. J. Allen Hynek concerning future UFO Research projects.

Last but certainly not least, Mr. and Mrs. Lorenzen would like to thank Mr. Robert Achzehner, ex co-chairman of the APRO Illinois Section who met her plane at Chicago and put her safely aboard her plane to Peoria. He then attended the Conference, drove back to Chicago in time to meet her plane in Chicago and get her aboard her jet for Tucson. His assistance to Mrs. Lorenzen during the Conference, with tape recorder and camera, was invaluable.

The APRO Photo and Art display which was located in the Hall outside the Conference Room was a big hit with the crowd.

(See Conference — Page Four)

Conference —

(Continued from Page Three)

In view of the Conference's success, the Staff would like to urge other groups to sponsor like affairs in other parts of North America and APRO will lend its support and co-sponsorship.

Midwest Conference Tapes

The Midwest UFO Conference was held on June 13, 1970. If you missed the opportunity to attend, you will be pleased to know that tapes of the conference which was said to be "the best attempt to bring the problem of the UFO enigma into the public eye" are now available.

The originals and the copy tapes of the conference are recorded on high quality BASF tapes from Germany. This brand of tape comes in its own rugged, plastic "Perma-Store" library box which is excellent for protecting the tape during mailing.

The costs for these tapes are:

- 7" reel — 3¾ inches per sec.,
speed — 2 track mono. \$20.00
- 5" reel — 3¾ inches per sec.,
speed — 2 track mono. \$25.00
- 3" reel and cassette tapes will
be made according to demand.

- 7" reel — 3¾ inches per sec.,
speed — 2 track mono.,
any one speaker's lecture \$ 4.50
- 5" reel — 3¾ inches per sec.,
speed — 2 track mono.,
any one speaker's lecture \$ 5.00
- 3" reel and cassette tapes will
be made according to demand.

A list of speakers appears in this issue. Please refer to them when ordering. All inquiries and orders should be addressed to:

Midwest UFO Conference Tapes
634 Park Avenue
Peoria, Illinois 61603

N. Z. —

(Continued from Page One)

said the object definitely impressed him as being solid and metallic.

A. Coveny, when interviewed by Mr. Alford, expressed his surprise that comparatively few people (he felt at least half of Napier should have seen it) viewed the object. He said that "Here at the school everyone stood with their mouths open trying to work out a logical explanation." When a

pupil asked him if it was a flying saucer he answered in the affirmative because he could give no other answer.

Coveny admitted his skepticism about UFOs prior to his experience. When asked by Alford to compare its apparent size in the sky with an object at arm's length he said it was huge — like a basketball at arm's length, as it changed from oval to round. Coveny's own words to Mr. Alford were that it appeared to be "something out of this worldly concept — something from another dimension."

Mr. Alford called the National Airways Corporation offices in Napier in an attempt to get some confirmation. They suggested that he call the Control Tower for the Captain of the aircraft which had landed during the sighting. He called the Control Tower where he was put off with the suggestion that he'd have to get permission from Wellington for that information. Alford called back to the Napier office which then told him to contact the landing field which he did. He was told by a spokesman there that the Captain's signature was indecipherable. Alford feels, as does the staff of APRO, that officials at the field should have had some record of what craft was landing at that time and who the Captain was.

Apache —

(Continued from Page One)

sulation was not determined.

- (d) The "ceramic" sheath was composed of polycrystalline calcite (CaCO_3).

The central, magnetic, iron-manganese alloy core is similar to existing terrestrial ferrimagnetic Heusler alloys. The fibrous, electrical-insulation surrounding the core is similar in appearance to terrestrial electrical insulation. The ceramic sheath is most unusual in that it is composed of polycrystalline calcite (CaCO_3). Calcite (CaCO_3) or its more common equivalent, limestone, is never used as a terrestrial insulator or dielectric ceramic, to the writer's knowledge.¹ Calcia (CaO) has been considered² for use as a polycrystalline oxide ceramic at high temperatures, but cannot be used at room temperatures due to the phenomenon of "slaking." In addition, calcia spontaneously picks up carbon dioxide at room temperature and transforms to calcite. The transformation from calcia (CaO) to calcite (CaCO_3) gives off heat.

The transformation of calcia to calcite provides a possible explanation for the changes observed in the artifact since it was first found.³ If it is assumed that the ceramic was CaO when it was found, the color change could be accounted for by the transformation to calcite CaCO_3 . Similarly since this reaction is exothermic, enough heat might be given off to soften the thermoplastic box the object was stored in.

In summary, this analysis has not provided proof that the artifact was extraterrestrial. On the other hand, it is truly an unusual object.

REFERENCES

- (1) Henry, Edward C: *Electronic Ceramics*, Anchor - Doubleday, New York, 1969.
- (2) Kingery, W. O.: *Introduction to Ceramics*, John Wiley and Sons, New York, 1960.
- (3) (Anon.): *The A.P.R.O. Bulletin*, Jan.-Feb. 1970, p. 1.

Two Controversial "Papers"

"Introductory Space Science Volume II" and "UFOs—What To Do" are two papers which have caused quite a stir in UFO circles in the first half of 1970. Many individuals have assumed that the papers indicate some sort of endorsement of UFO Research by Rand Corporation (where the author of "UFOs—What To Do" is employed) and the Air Force Academy where "Introductory Space Science Volume II" was generated.

The fact of the matter is that the former was authored by George Kocher, an employee of Rand "for circulation among my colleagues for the purpose of educating them and interesting them in the subject" (Kocher's own words).

The latter paper was edited by Major Donald G. Carpenter and authored by eight individuals in the Physics Department of the USAF Academy. It is neither published material or of an official nature. Both papers lean heavily on published material from the field of civilian UFO research and reach no conclusions.

ADDRESS CHANGES

Always include old and new
Zip Codes.

Aerial Artifact Retrieved in Missouri

The St. Louis *Globe-Democrat* for May 26 carried an article describing the fall of a UFO (unidentified falling object). At 9 a.m. that morning Mrs. Elida Kent of Festus, Missouri, was working in her garden when she heard a sound like a gun shot. Turning around, she saw a small red-hot object burning the grass behind her. She called the Sheriff's office and a deputy came to her home. After about 15 minutes when the object had cooled off, Deputy McKee took the object to the Sheriff's office. It was approximately 1 and 1/5 inches in diameter and about 2 inches long. It was heavily charred and a small piece was chipped off one end.

Upon learning of the artifact, Mrs. Lorenzen of APRO contacted Dr. Willard Armstrong, APRO Field Investigator in St. Louis who with his wife Carol made two trips to Festus to investigate and obtain the object. A report was submitted and the object was turned over to Dr. Walter Walker, APRO Consultant in Metallurgy. Dr. Walker concurs with Dr. Armstrong's opinion that the object is probably graphite but the necessary tests to attempt identification will be made. Further information will be published in a future issue of the Bulletin whether or not the object is found to be unusual.

Two from Brazil

On the first of March 1970 a family in the acquaintance of Jader U. Pereira of Porto Alegre, Rio Grande do Sul state, Brazil, observed a roundish light of the brightness of the star Sirius which went through a series of complicated maneuvers over that city for a period of 40 minutes. The principal witness and head of the family is an amateur astronomer of 20 years experience.

The maneuvers were so many and varied that they are difficult and space-consuming to describe. However, the following light changes were noted: At the beginning of each horizontal movement the object brightened momentarily and as the speed increased the object turned red. During vertical movements the light became an intense, brilliant red (like a jewel) and a tiny pinpoint of green light became visible. The object, besides its vertical and horizontal movements, was also observed to execute a

"pendulum" movement several times. Starts and stops were sudden without transitional speeds and there was no sound.

Our second report took place over Cabo Frio, State of Rio de Janeiro at 9:05 p.m. on the 28th of March and was investigated by APRO Field Investigator, Mrs. Irene Branchi of Rio. There were 14 witnesses.

The object was first thought to be a satellite until it began to maneuver. The yellowish light came out of the west, stopped, went west again, hesitated, stopped again, started back toward the east, then headed north in the direction of the observers. As it proceeded toward them its speed increased, it became larger and changed color to a bright red. It went out of sight into the north, over the heads of the observers and was soon out of sight behind a nearby building. The witnesses kept quiet as the object passed overhead and noted that no sound accompanied it. It was a clear, windless night and the witnesses were all "UFO skeptics" prior to their experience.

Recent Visitors to APRO

Mr. and Mrs. Lorenzen and Richard Greenwell were happy to welcome Mr. and Mrs. Robert Gribble of Seattle, Washington to APRO during the week of June 14. Mr. Gribble has been director of the Aerial Phenomena Research Group for many years and ways and means for closer cooperation between APRG and APRO were discussed.

Also visiting APRO during the same week were Mr. and Mrs. Donald Richmond of Pueblo, Colorado. The Richmonds are APRO Field Investigators and Mr. Richmond is a Deputy Sheriff in Pueblo County. As well as the Snippy incident (October 1967), Mr. Richmond has investigated many UFO reports in Colorado as well as Northern New Mexico. From Tucson he and his wife Alice and daughter Donna left for La Madera, New Mexico to inquire into events which transpired during the 1964 "flap" in that area.

Greenwell Tours East Coast and Mexico

Invited by the Student Union Board at Temple University in Philadelphia to lecture on UFOs on April 7, Mr. Richard Greenwell, APRO's Assistant Director, took the opportunity to visit other East Coast cities and met with APRO Field Investigators and Consultants in Washington, D.C., Balti-

more, Philadelphia, New York and Boston. His 11-day trip began on April 3.

His first visit in Washington was with NICAP, where he met and talked at length with Acting Secretary-Treasurer Stuart Nixon. Past and future relations between APRO and NICAP were reviewed and it was agreed that the two major organizations should maintain a closer relationship in the future. With the change of leadership in NICAP it is apparent that the aims of the Washington-based group are considerably closer to those of APRO now than in the past. Although the possibilities of APRO-NICAP cooperation in various fields were discussed, no specific agreements have yet been made. Mr. Nixon stated that there are no immediate plans for a new leadership in NICAP. This was the first time that a staff-level APRO-NICAP meeting had taken place.

That evening and the following morning, Mr. Greenwell was the guest of Mr. Philip Klass, Senior Editor of *Aviation Week and Space Technology* and APRO member; his and APRO's different philosophies were discussed at some length. Mr. Klass attributes most UFO sightings to misidentifications, ball lightning and plasma phenomena.

Dr. John C. Munday new APRO Consultant in Biophysics (see separate article) accompanied Mr. Greenwell to Baltimore in the afternoon to meet Dr. Richard C. Henry, APRO Consultant in Astrophysics. The following day, a meeting of Baltimore area Field Investigators was held in Dr. Henry's apartment and various topics pertaining to field investigations and general research were discussed for several hours. Dr. Munday was also present.

The next morning, Monday, April 6, Mr. Greenwell went to Philadelphia and on the 7th lectured at Temple University. That evening he arrived at the home of Ivan T. Sanderson, biologist, author of many zoological books (including *Uninvited Visitors*) and Director of the Society for the Investigation of the Unexplained (SITU). Cooperation between APRO and SITU was discussed and agreed upon.

On April 8, Greenwell arrived in New York City and met and held discussions with Dr. L. Gerald Laufer, APRO Consultant in Psychiatry and Dr. Robert W. Johnson, Consultant in Metallurgy. A meeting of Field Investigators in the New York City area

(See Greenwell — Page 6)

Greenwell —

(Continued from Page Five)

was held on the 9th, which Dr. Johnson attended. On April 11, APRO's Assistant Director arrived in Boston and was the guest of Dr. Vladimir Stefanovich, Consultant in Biochemistry. Several projects in which Dr. Stefanovich is taking active part were discussed. The following day, Mr. Greenwell met with some members of the NICAP-Massachusetts Subcommittee, including David and Walter Webb and Raymond Fowler. Also present was Mrs. Betty Hill who kindly drove down from Portsmouth to meet and talk with Mr. Greenwell. Mr. David Webb was host to Mr. Greenwell during his stay in Boston, after which he returned to Tucson on April 13.

Mr. Greenwell's trip could be described as an important contribution to keeping the communication channels open between APRO in Tucson and its Field Investigators and Consultants on the East Coast.

Most of Mr. Greenwell's traveling expenses were covered by Temple University. The difference, as in the past, came out of personal funds, not APRO's budget.

On April 17, Mr. Greenwell departed on a week's tour of Mexico. He met with Field Investigators Oscar H. Egly, in Guadalajara, and Roberto Martin and Alfonso Martinez in Mexico City. As a result of his discussions with these members, details of which were studied by APRO's Board of Directors, Mr. Roberto Martin has been selected as the new APRO Representative for Mexico. Mr. Martin is an electronics engineer who has been involved in UFO research for 12 years. APRO's previous Representative, Jesus Hernandez Garibay, was forced to resign due to pressures of other work and APRO-Mexico was disbanded.

Colorado Section Chairwoman Resigns

Mrs. Lee Trenholm of Boulder, Colorado, who headed the Colorado State APRO Section for several years, has resigned due to personal reasons. Mrs. Trenholm did an exceptional job during her tenure as chief of that section and it has been decided at Headquarters that no attempt will be made to replace her, and that Headquarters will rely on the Field Investigators Network in that area for information from Colorado. We would like to urge Colorado members and Field Investi-

gators to report directly to Headquarters in Tucson in the future.

Foreign Rates Increased — Air-Mailing Cancelled

During a recent APRO Board meeting it was decided to raise the dues of membership and Bulletin subscription rates in foreign countries by \$1 a year, effective July 1, 1970. The new \$6.00 membership and \$8.00 subscription rates were necessitated by the extra cost of mailing the Bulletin to other countries. Members and subscribers in Canada and Mexico will not be affected by this increase and their rates remain the same as in the U.S. (\$5.00 and \$7.00).

At the same time, it was decided to discontinue the air-mailing of Bulletins to members and subscribers abroad for an extra \$1.00 a year. APRO provided such service during 1969, but it was determined that it created both a monetary loss and administrative problems. Members in foreign countries are requested to bear with APRO in this matter; sea-mail delivery usually takes 2-3 weeks to Europe and Latin America and sometimes more to other parts of the world.

Membership Cards

All APRO members should have received their permanent, plastic-laminated, membership cards by now. Those who did not provide photos, received cards bearing their name only.

A number of cards were poorly manufactured during 1969; these will be replaced upon request and their return to APRO. Likewise, APRO will replace cards which have incorrect spelling. Should a member wish a new card due to change of name or would like an updated photograph used, a fee of 50¢ will be charged.

Subscribers to *The APRO Bulletin* are not APRO members and do not receive these cards. If you are a member and have not received your card, please notify the Membership Department requesting one. Always give complete name and address including Zip Code in all communications with the Membership Department.

Reports

APRO will soon begin preparing a computer catalog of its files, including cases listed in foreign periodicals.

Individuals and organizations abroad have been very cooperative and we are regularly receiving translated case from many countries including Yugoslavia, Czechoslovakia and Rumania in Eastern Europe.

If YOU have a report which has not been submitted to Headquarters, please consider doing this as soon as possible. One seemingly unimportant case could be very important in a computer study.

Back Bulletins Available

APRO has a stock of back bulletins which are available to members and subscribers at 50¢ each, postpaid, as per the following list:

- 1957 — Nov.
- 1958 — Jul.
- 1959 — Mar., Jul.
- 1960 — Mar., Jul., Sep., Nov.
- 1961 — Jan., Mar., May, Jul., Sep., Nov.
- 1962 — Jan., Mar., May, Jul., Sep., Nov.
- 1963 — Jan., Mar., May, Jul., Sep., Nov.
- 1964 — Jan., Mar., May
- 1967 — Nov.-Dec.
- 1968 — Jan.-Feb., Mar.-Apr., May-Jun., Jul.-Aug., Sep.-Oct., Nov.-Dec.
- 1969 — Jan.-Feb., Mar.-Apr., May-Jun., Jul.-Aug., Sep.-Oct., Nov.-Dec.

When ordering, be sure to indicate exactly which bulletins are required. Send remittance for the correct amount and print name and address clearly.

Early 1970

UFO reports have not been numerous during the first half of this year. However, reports from past years now becoming available because of our increased coverage throughout the world will be presented in the Bulletin from time to time.

EDITORIAL NOTE

This issue of the Bulletin is two pages short; however, the two pages will be added to the July-August issue which will contain details of the new Magnesium tests, a multiple-witness car-buzzing incident in Florida and a multiple witness occupant sighting in Brazil.

CORAL LORENZEN, *Editor*

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85712, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

TUCSON, ARIZONA — JULY-AUGUST, 1970

CAR CHASE INCIDENT IN FLORIDA

Final Air Force UFO Catalog

Upon request, the United States Air Force furnished APRO with the revised and final UFO report catalog from 1947 up to the termination of Project Blue Book at the end of 1969. The Air Force received a total of 12,618 reports in the 23 years it maintained a UFO project, 701 of which remain unidentified cases. The peaks in the listing are in 1952 (303 unidentified — total 1,501), 1957 (14 unidentified — total 1,006) and 1966 (32 unidentified — total 1,112). Below is the complete Air Force catalog.

| Year | Total Reports | Unidentified |
|--------|---------------|--------------|
| 1947 | 122 | 12 |
| 1948 | 156 | 7 |
| 1949 | 186 | 22 |
| 1950 | 210 | 27 |
| 1951 | 169 | 22 |
| 1952 | 1,501 | 303 |
| 1953 | 509 | 42 |
| 1954 | 487 | 46 |
| 1955 | 545 | 24 |
| 1956 | 670 | 14 |
| 1957 | 1,006 | 14 |
| 1958 | 627 | 10 |
| 1959 | 390 | 12 |
| 1960 | 557 | 14 |
| 1961 | 591 | 13 |
| 1962 | 474 | 15 |
| 1963 | 399 | 14 |
| 1964 | 562 | 19 |
| 1965 | 887 | 16 |
| 1966 | 1,112 | 32 |
| 1967 | 937 | 19 |
| 1968 | 375 | 3 |
| 1969 | 146 | 1 |
| TOTALS | 12,618 | 701 |

In his communication to APRO, Lt. Colonel James H. Aikman, of the Secretary of the Air Force Office of Information (SAFOI), repeated the two decade-old Air Force contention that no UFO had ever "given any indication of threat to our national security . . ." and that "there has been no evidence submitted to or discovered by the Air Force that sightings categorized as 'unidentified' represent technological developments or principles beyond the range of present day scientific knowledge."

APRO's New Findings On Ubatuba Magnesium

In 1967, at the request of the Condon Committee, APRO loaned the University of Colorado UFO Project one of the Ubatuba UFO magnesium fragments (No. 3) for study. Under the direction of Dr. Roy Craig, a physical chemist, this was subjected to various chemical analyses. The *Condon Report* contained a summary of this study, in which it was stated that magnesium as pure as the Ubatuba sample submitted had been produced on Earth previously by the Dow Chemical Co. Dr. Craig dismissed the case stating that "the fragments do not show unique or un-earthly composition . . ."

As a result of the *Condon Report's* negative results, APRO proceeded with its own investigation and in 1969 turned the remaining Ubatuba magnesium over to Dr. Walter W. Walker, Consultant in Metallurgy, for a structural, non-destructive analysis. This was the first time that a metallurgist had inspected the Ubatuba magnesium or that a structural study was undertaken. Dr. Walker, an Associate Professor of Metallurgical Engineering at the University of Arizona, Tucson, with the assistance of doctoral fellow Ed Benn, subjected the magnesium to microhardness studies, x-ray diffraction analysis, microstructural studies and dislocation etch-pit studies. Dr. Walker's work was evaluated and approved by APRO's (other) Consultant in Metallurgy, Dr. Robert W. Johnson, who did not know Dr. Walker personally. Dr. Johnson is a Development Metallurgist and Head of the Advanced Materials Division, Materials Research Corporation, Orangeburg, New York.

Their findings concluded that the Ubatuba magnesium fragments were *directionally solidified castings*. Directional solidification was not being studied as early as the Ubatuba UFO incident (1957). "This might be interpreted," Dr. Walker stated recently

(See Magnesium — Page Five)

The following sighting was described in a letter to APRO Headquarters by one of the witnesses and the investigation was carried out by Field Investigator Ed Hollifield. Names are withheld by request.

On the night of June 29 at approximately 9:32 p.m. Mr. and Mrs. R. and their two sons of Apopka, Florida were returning home from Orlando, Florida by car. Mrs. R. spotted a glowing green oval object with a smaller blue inner ring about a thousand feet to the right of their car and approximately 100 feet off the ground. She called it to the attention of her husband who was driving and when Mr. R. sighted it, it was descending at about a 45 degree angle toward their car. They estimated the blue ring to be about 20 feet in diameter and Mrs. R. got the impression the ring was depressed into the object. Both witnesses noted that the object had a hazy edge and that the bottom was convex.

The R. car was travelling at about 45 miles per hour when the object was first sighted but after it moved in and over the car Mr. R. accelerated to about 90 miles per hour. Mr. R. felt the object was higher than the nearby service power lines but Mrs. R. felt it was lower. It paced the car for about a mile but as the Roell car passed under a street light it was temporarily lost from sight.

Mr. R. slowed the car to turn into the driveway of his home which is located in the orange groves surrounding Apopka, and the UFO moved slightly ahead. As the Rs ran from their car to their house the object made a level close (100 ft. diameter) sweep of the area and moved off leaving a trail of mist about 20 feet wide which gave off a very pale green light. The mist hung in the air a few minutes before dissipating. Mrs. R.'s father, who lives next door, also observed the mist. It spread out evenly and lost its glow but did not fall to the ground. The path of the mist left by the UFO was thick on the outside of the turn and thin on the inside. The Rs at first could not see stars

(See Florida — Page Five)

THE A.P.R.O. BULLETIN

Published by the

AERIAL PHENOMENA

RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road

Tucson, Arizona 85712

Phone: 602-793-1825 and 602-326-0059

Copyright 1970

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

John Hopf, Photo-analyst

A.P.R.O. STAFF

International Director L. J. Lorenzen
 Assistant Director Richard Greenwell
 Secretary-Treasurer Coral E. Lorenzen
 Membership Secretary Madeleine H. Cooper

CONSULTANTS

Aeronautics Rayford R. Sanders, M.S.M.E.
 Astronomy Leo Vern Standeford, Ph.D.
 Astrophysics Richard C. Henry, Ph.D.
 Anatomy Kenneth V. Anderson, Ph.D.
 Biology Robert S. Mellor, Ph.D.
 Biophysics John C. Munday, Ph.D.
 Biochemistry Vladimir Stefanovich, Ph.D.
 Chemistry Allen R. Utke, Ph.D.
 Computer Technology Vlastimil Vysin, Ph.D.
 Engineering James A. Harder, Ph.D.
 Exobiology Frank B. Salisbury, Ph.D.
 Geology Philip Seff, Ph.D.
 Linguistics P. M. H. Edwards, Ph.D.
 Mathematics G. K. Ginnings, Ed.D.
 Medicine Benjamin Sawyer, M.D.
 Metallurgy Robert W. Johnson, Ph.D.
 Metallurgy Walter W. Walker, Ph.D.
 Optics B. Roy Frieden, Ph.D.
 Physics Horace C. Dudley, Ph.D.
 Physics René J. Hardy, Ph.D.
 Physiology Harold A. Cahn, Ph.D.
 Psychiatry L. Gerald Laufer, Ph.D.
 Psychology R. Leo Sprinkle, Ph.D.
 Religion Robert S. Ellwood, Ph.D.
 Science Education A. Henry Swann, Ed.D.
 Seismology John S. Derr, Ph.D.

REPRESENTATIVES

Argentina Guillermo Gainza Paz
 Australia Peter E. Norris
 Belgium Edgar Simons
 Bolivia Fernando Hinojosa V.
 Brazil Prof. Flavio Pereira
 Britain Anthony Pace
 Chile Pablo Petrowitsch
 Colombia John Simhon
 Costa Rica Rodolfo Acosta S.
 Cuba Oscar Reyes
 Czechoslovakia Jan Bartos
 Denmark Erling Jensen
 Dominican Republic Guarionex Flores L.
 Ecuador Col. Raul Gonzalez A.
 Finland Kalevi Hietanen
 France Aime Michel
 Germany Capt. William B. Nash
 Greece George N. Balanos
 Greenland Joseph March
 Guatemala Eduardo Mendoza P.
 Holland D. J. H. Dreux
 Hong Kong Alex Pizarro
 Ireland Martin Feeney
 Italy Roberto Pinotti
 Japan Jun'ichi Takanashi
 Lebanon Menthir El Khatib
 Malta Michael A. Saliba
 Mexico Roberto Martin
 New Guinea Rev. N. C. G. Crutwell
 New Zealand Norman W. Alford
 Norway Finn Einar Myhre
 Peru Ermano Maniero
 Philippine Republic Col. Aderito A. de Leon
 Puerto Rico Sebastian Robiou L.
 Rumania Tiberius A. Topor
 Sierra Leone Bernard J. Dodge
 Singapore Yip Mien Chun
 Spain Antonio Ribera
 Sweden K. Gosta Rehn
 Switzerland Dr. Peter Creola
 Tasmania William K. Roberts
 Thailand Donald A. Rode
 Trinidad Eurico Jardim
 Uruguay Walter Fernandez L.
 Venezuela Askold Ladonko
 Vietnam Paul G. Nichols

Newswires, newspapers, radio and television stations may quote up to 250 words from this publication, provided that the Aerial Phenomena Research Organization, Inc. (or APRO), Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.

"Science and the UFO" Still Available

The 40-page publication "Science & the UFO" is still available from APRO at \$2.00 U.S. (\$2.50 Canada and Mexico — \$3.00 foreign) postpaid. It covers the panel discussions of Drs. Harder, Hynek, McDonald, Salisbury, Saunders and Sprinkle at the August, 1969, National Amateur Astronomers Convention in Denver, Colorado. Recommended. Make checks payable to APRO.

Walker and Johnson Receive Fontes Research Award

The Scientific UFO Research Award, sponsored by APRO's Olavo T. Fontes Memorial Fund, has been awarded to two APRO Consultants in Metallurgy, Dr. Walter W. Walker and Dr. Robert W. Johnson, for their research paper "Further Studies on the Ubatuba UFO Magnesium Samples." (This Bulletin contains a separate article on their findings).

The Board of Judges, headed by Dr. J. Allen Hynek, selected the paper "Religious Aspects of UFO Movements in Southern California" by Dr. Robert S. Ellwood, APRO Consultant in Religion, as second best. The paper "The UFO Phenomenon and the Physical Universe" by René J. Hardy, APRO Consultant in Physics, came third. Dr. Ellwood and Dr. Hardy will receive Honorable Mentions and special plaques from the Fontes Fund. Dr. Walker and Dr. Johnson will receive a cash prize of \$200, donated by APRO members for this purpose during the past 18 months.

APRO is planning a press conference at which Dr. Walker will receive his plaque and will answer questions the press may have on his analysis of the Ubatuba magnesium. This press conference will be held early in September and details will be carried in the next issue of the Bulletin.

In his communication to APRO, Dr. Hynek said the paper by Drs. Walker and Johnson had been selected because "it demonstrates the application of the scientific method to UFO evidence . . . the paper illustrates how UFO evidence should be dealt with." As for Dr. Ellwood's paper on his religious-oriented contactee research, Dr. Hynek stated that it deserved an Honorable Mention because of "its scholarly, sympathetic and unbiased treatment of this unfortunate aspect of the UFO scene, and for ably segregating and weeding out this troublesome area. . . ."

Below is a listing of other entries submitted to the Board of Judges for the Research Award: "Science, Society and the UFO" by Arthur R. Bray; "UFOs and Diamagnetism" by Eugene H. Burt; "Belief Systems, UFOs and Psychophysiology" by Dr. Harold A. Cahn; "The New Perspective on Ufology" by Kim Craig and John Dixon; "Electronic Restoration of UFO Photographs" by Dr. B. Roy Frieden; "Exobiology and the UFO" by Dr. Frank B. Salisbury; "Aeronautical Implications of UFO Performance" by Rayford R. Sanders; "Philosophic Imperatives for UFO Research" by Dr. Benjamin Sawyer; "Hypnotic and Psychic Implications in the Investigation of UFO Reports" by Dr. R. Leo Sprinkle; and "UFO Phenomena and Residues of Biological Origin" by Dr. Vladimir Stefanovich.

Drs. Cahn, Frieden, Salisbury, Sawyer, Stefanovich and Mr. Sanders are APRO Consultants. The Board of Judges, consisting of independent scientists outside of APRO, was comprised as follows: Dr. J. Allen Hynek, Head of the Astronomy Department, Northwestern University, Evanston, Illinois; Dr. Thornton Page, Research Associate, Manned Spacecraft Center, NASA, Houston, Texas; Dr. Robert L. Hall, Head of the Sociology Department, University of Illinois, Chicago, Illinois; Dr. Sydney Walker, III, Neurodiagnostic Procedures, La Jolla, California.

Any person (or group) was eligible to compete for the award, regardless of citizenship or background (excepting members of the Board of Judges, APRO's Staff or APRO's Board of Directors and their close relatives) and papers could be presented in any language. APRO only received 13 serious entries, mostly from its Consultants. Consequently, another Research Award contest will not be opened in the near future.

The next mission of the Olavo T. Fontes Memorial Fund, created in 1969 to sponsor UFO related research, will be to provide the Field Investigators Network with the investigative manual being planned and the new UFO Report Forms for the membership at large. So far, the Fontes Fund has received almost \$100 in donations for the manual and the new form. Further donations (make checks payable to the Fund) would be appreciated and are tax deductible.

Send Address Changes!

Breakdown of Field Investigators Network

APRO's Field Investigators Network was initiated on March 1, 1969. On July 1, 1970, 16 months later, the Network consisted of 350 individual APRO members who report directly to Headquarters. Of these, 48 Field Investigators were located in 23 foreign countries (besides APRO Representatives in 46 countries) in Latin America, Europe and Australia.

There were 302 Field Investigators in North America (U.S. and Canada) with concentrations in metropolitan areas, such as Boston, New York, Miami, Chicago and Los Angeles. California, with 45 Field Investigators, was the most well covered state, followed by Texas (22), Ohio (17), New York (16), Illinois (15), and Missouri (15). It is hoped that the Network will eventually grow to 500 individuals and that States with low coverage, such as the Dakotas, Montana and Idaho, can be included.

Below is a breakdown of the professional activities of Field Investigators in North America:

| | |
|-----------------------------|------------|
| Administrators | 20 |
| Businessmen | 12 |
| Clergymen | 4 |
| Engineers | 65 |
| Medical doctors | 11 |
| Military personnel | 28 |
| Photographers | 7 |
| Pilots (non-military) | 4 |
| Police officers | 5 |
| Scientists in Industry | 9 |
| Teachers | 17 |
| Technicians | 30 |
| University professors | 14 |
| University students | 29 |
| Other | 47 |
| TOTAL | 302 |

Over two-thirds of these 302 Field Investigators have undertaken academic studies, most of them obtaining degrees as follows:

| | |
|-------------------------|------------|
| Associate degrees | 9 |
| Bachelor degrees | 108 |
| Masters degrees | 36 |
| Doctoral degrees | 31 |
| TOTAL | 184 |

If you are a member who failed to send in one of the new Membership Forms during 1969 and would like to be a Field Investigator, you can obtain another Membership Form by writing to the Membership Department. Field Investigators are selected on the basis of information contained in these forms.

Those Field Investigators who have not been contacted in connection with UFO incidents should not interpret it as a lack of coordination. It means that, as far as APRO was aware, there simply was no UFO activity in those areas in the last year or that other Field Investigators were assigned to the cases.

Field Investigators are likely to be contacted at any time, depending on the geographic distribution of UFO phenomena. It is very important for APRO to have up-to-date information on addresses and telephone numbers. When sending an address change, be sure to give your new telephone number and area code, as well as old and new zip codes.

Foreign Membership Drive

APRO intends to increase its membership around the world during the next year. To do this, it will be necessary to publicize APRO's existence in newspaper and magazine articles, radio and TV presentations and public lectures. Representatives abroad (also Field Investigators in other countries) are requested to try to recruit new members using these means to the extent that their time allows.

APRO now has a new Membership Application Form and has just produced a new standard letter of information. Foreign Representatives and Field Investigators who require them should write to Headquarters, stating how many are needed. APRO will also supply any specific information requested that is pertinent to the membership drive.

Membership including Bulletin in all foreign countries (except Canada and Mexico) is now \$6.00. Subscription to the Bulletin only is now \$8.00.

If new members and Field Investigators can be recruited in other countries, APRO's investigative coverage will improve as a consequence. We ask for all possible cooperation.

Limitations of Photon Thrust

By J. A. HARDER, PH.D.

The following is the first of a series of articles dealing with possible UFO propulsion by Dr. James Harder, APRO's Consultant in Engineering).

A number of persons have written APRO about their speculations on many aspects of UFOs, including that of the propulsion problem. Some of these are ingenious, but many reveal a degree of ignorance of basic scientific principles. Not that these principles are infallible; no student of history could claim that. However, it

is necessary to apply some discipline to one's imagination lest our speculations turn discussion into a veritable Tower of Babel. When our ideas are at variance with established scientific theory for example, we must be able to recognize this and be prepared to offer a reasoned explanation of how new information could tend to modify that theory.

Unfortunately the kind of discipline required admits of few short cuts; it requires many years of formal or informal self-education. Predictably those who are the most impatient with this discipline are at the same time the noisiest, in the sense that they contribute a disproportionate share of confusion to our search for the signal, and thereby reduce the "signal-to-noise ratio."

From time to time this column will try to set the record straight, so far as is possible, by giving capsule explanations of some of the scientific principles that should discipline our speculations. At times, by way of illustration, some of the unfounded ideas that make their way to APRO will be analyzed. Sometimes this analysis will be painful to the authors of the ideas, although this is not intended; what is intended is that whatever educational value the column may have be enlivened by application to actual cases.

A number of persons have suggested that a thrust might be achieved through the emission of photons (light, etc.) It is true that the emission (or absorption) of light or other electromagnetic radiation is accomplished by small forces. What is the magnitude of these forces? From measurements we know that the momentum carried by a photon is $p = E/c$, where p is the momentum, E is the energy, and c is the velocity of light. (From this we can infer the "rest mass" of the photon, because $E = mc^2$, where m is the so-called rest mass.) Of course, photons are never at rest, so the mass is only hypothetical. It is therefore more reasonable to calculate with the value of the photon momentum. Any forces that are produced will be proportional to the rate of emission of momentum, as is easily confirmed by those familiar with rockets; and from the above equation, this will be directly proportional to the rate of energy emission divided by the velocity of light. Unfortunately for the idea of photon thrusters, the velocity of light is very large, so that in order to produce one dyne of thrust, (comparable to the

(See Thrust — Page Four)

Thrust —

(Continued from Page Three)

force produced by a fly alighting on a table top) one must produce energy at the rate of three kilowatts. One observation of an extraordinarily intense light emanating from a UFO was reported in the Condon Report (page 277, Bantam edition). Its intensity was estimated to be 800 megawatts; using the above figures, this could produce a thrust of 267,000 dynes, enough to support about a half pound of mass against the earth's gravitational field.

Ignoring for the moment the problem of generating the required power, we should realize that this same power would be released as heat were the thrusting light beam to strike the earth's surface. A light intensity sufficient to produce a thrust of several tons would produce enough heat to vaporize rock at the rate of several thousands of tons per second. The argument is not that such energy rates are impossible (though it would seem that they are improbable) but that they are not observed. Since the quantum-mechanical principles governing photons have been proved beyond a reasonable doubt, it appears that a thrust mechanism based on photon emission cannot reasonably be advanced to explain UFO propulsion or suspension.

(Next issue: magnetic fields and the theory of magnetic charge.)

APRO Plans Computer Catalog

APRO recently formed a Committee for Computer Data Processing (CCDP) to study methods by which APRO's reports on file (estimated at in excess of 20,000) and reports from other sources could be computerized.

The Committee is headed by APRO's Consultant in Aeronautics, Mr. Rayford R. Sanders, a resident of the Los Angeles area. Mr. Sanders is a Scientific Programmer and Stress Analyst with a California corporation. Mr. Paul J. Smith, an Information Systems Consultant in the Los Angeles area, is the Technical Coordinator of CCDP. Mr. Smith (see his article on UFOs and power failures in the March-April *Bulletin*) has done the preliminary work, which is now being evaluated by other members of the Committee.

The other members are: Mr. Robert F. Moyer, Engineering Analyst in the Los Angeles area; Mr. Thomas M. Olsen, Nuclear Engineer in Maryland;

Mr. George Palos, Computer Specialist in Colorado; Mr. Robert M. Rooch, Orbital Analyst in Texas; Mr. Everett R. Walter, Senior Systems Analyst in the San Diego, California area. CCDP also has three Scientific Advisors, Dr. Vlastimil Vysin, APRO Consultant in Computer Technology, Dr. Harold A. Cahn, APRO Consultant in Physiology and Dr. J. Allen Hynek, Head of Northwestern University's Astronomy Department. Dr. Hynek is not an APRO member but has agreed to serve as a Committee Advisor. Other scientists whose experience would be an asset to the Committee will be appointed as Advisors in the future.

In order to utilize ideas that interested members may have, CCDP is requesting that anyone who would like to comment on the proposed computer system aspects do so at this time. Consideration now being given to the system (software) aspects of the project is along the lines of a table oriented file structure. Each table is to be driven by a table directory controlled via an executive function.

Each data table, comprising the input (UFO) sighting, reports data such as place, location, date, observers, etc. coded to conserve space. Retrieval of each table file will be accomplished at different levels; top level — country, state, city, etc. The choice of hardware will for the most part be dictated by the funding constraints on the project.

The originators feel that most information has been allowed for in the proposed structure. (Also, the proposed structure is such that it can be expanded or modified as necessary.) However, it is possible that some significant point will be left out if not called to the Committee's attention. It is also possible that some structure other than the one now considered would be better. If the reader feels that this may be the case, please notify the Committee, through APRO Headquarters, as soon as possible so that all suggestions may be included in the original discussions of the Committee.

The Committee should end its preliminary study sometime in September and a proposal will be submitted to a foundation in early 1971. It is estimated that, if funds are made available, it will take one individual about two years, working full-time, to enter all the data. Cooperation with other UFO research groups and individuals is being sought in this project. Further details will be made available in due course.

Incident in Illinois

A young lady who watched Mrs. Lorenzen on a TV interview program in Peoria, Illinois decided to attend the Midwest UFO Conference in that city the next day. Two weeks later her parents observed a strange light at their residence in Danvers, Illinois and she informed Mrs. Lorenzen of the incident by letter. Four members of the Aerial Phenomena Club of Central Illinois (which sponsored and hosted the UFO Conference) investigated for APRO. Mr. Dale Dufelmeier is a Field Investigator with APRO, as is Mr. Laird Carter. Mike Morey is a member of APRO and the fourth member of the team Richard Reynolds, is a member of APCCI. The four-man team is currently investigating other sightings referred to APRO in the central portion of Illinois.

By 9:30 p.m. on the evening of July 1, 1970, Mr. F. had gone to bed. The bed stands against the window on the north wall of the bedroom. Mrs. F. came into the bedroom and noticed a light through the window and after looking at it for a few seconds called it to her husband's attention and asked what it could be. He opened his eyes and took note of the fact that the light was bright enough to be visible on the bedroom walls. He first thought it was a fire but there were only weeds in the area where the light was located, and they were green and would not burn. He then got out of bed and joined his wife at the window. The couple watched the light for about 30 seconds during which time it appeared to be approaching them through a dip in the trees. Mrs. F. thought it was a light on a helicopter but it was much too large and made no sound. Mr. F. mentioned that the light seemed to enlarge as they watched and deduced that it was approaching the house. Mrs. F. felt the light was about one-third of the dip in the trees (20 feet in diameter) while Mr. F. felt it was the size of between a dime and a nickel held at arm's length (or 50 feet in diameter at that distance). Mr. F.'s impression was that the light was yellowish-white and Mrs. F. said it was reddish-orange. However, both agreed that it was much brighter than any car headlight at that distance, though not as bright nor the right color to be an arc light.

As the light approached the house its edges took on the appearance of a star, with points. It did not pulsate.

(See Illinois — Page Six)

Florida —

(Continued from Page One)

through the thick part of the mist.

The Roell's dog that was in the car during the incident did not react to the object's presence whereas a second dog, belonging to Mrs. R.'s mother, ran off howling just before the Rs and the UFO arrived at the house.

The Rs experienced no difficulties with their car during the sighting. Because of the trees which surround their house, the Rs were unable to observe the UFO after it made the sweep and moved off. No sound was heard by the witnesses. The night was clear and moonless with no wind. Visibility was unlimited and the entire sighting lasted only a couple of minutes. Mr. R. asked his neighbors if they had seen the object and found that several had seen similar objects in the past year but none had seen this particular one. The two young R boys were in the car at the time of the sighting and confirmed their parents' reports. At no time did the Rs get a look at the top of the object. Until June 29 the Rs had never thought seriously about UFOs and were skeptical of what they had read or heard about them.

Mrs. R. initially contacted APRO because she had seen the name on one of the Lorenzens' books and this sighting is only one of many reported to APRO because the witnesses had heard of APRO through a book.

Magnesium —

(Continued from Page One)

"as meaning that the samples were from a more advanced culture." The relative creep characteristics of the Ubatuba samples and those of terrestrial materials were determined by the indentation creep method. The Ubatuba samples were found to be much more creep resistant than terrestrial samples.

The APRO report by Dr. Walker and Dr. Johnson states: "Such slow, directional cooling may have been purposely adopted to achieve certain physical or mechanical properties not normally encountered in random, polycrystalline magnesium. . . . However, the properties which were desired in the present case are primarily a matter of speculation." The report continues: "Nowhere in our present technology is there a use for oriented, cast, coarse-grained metals such as observed in this study. The possible uses for such materials in advanced



DR. WALTER W. WALKER

"... an argument for extraterrestrial origin."

control of propulsion systems in turn, can only be speculated upon. In a rather oblique manner, this may be taken as an argument for extraterrestrial origin."

Referring to the Dow magnesium which the *Condon Report* used to dismiss the case, the report states: "The general low hardness of the Dow material is equivalent to the Ubatuba material. . . . However, probably due to the lack of grain boundaries, the Ubatuba material possesses markedly better high temperature properties." The report concludes that ". . . the effect of elevated temperatures is much lower on Ubatuba material than on terrestrial polycrystalline material of equivalent purity."

Concerning the difference in purity between Ubatuba Sample No. 1 analyzed in Brazil, Sample No. 2 analyzed by the Atomic Energy Commission (AEC) National Laboratory and the Dow Metal Products Laboratory and Sample No. 3 analyzed by the University of Colorado UFO Project, the report states: "If Sample No. 1 had the same composition as Sample No. 2 and if emission spectrography techniques were identical, then the reported analytical results should have been identical. But they were not. The question, therefore, arises as to whether the discrepancy is in analytical techniques or in composition. . . . If two qualified, reputable emission spectrographic laboratories such as the AFC Laboratory and the Dow Laboratory cannot arrive at the same results on the same sample (Sample No. 2), then we have no cause to suggest that the Brazilian analysis (of Sample No. 1) were any less pre-

cise than the North American analyses of Sample No. 2 (as suggested in the *Condon Report*). If it is accepted that Brazilian analyses of Sample No. 1 were as correct as those on Sample No. 2 then it can only be concluded that Sample No. 1 was much purer than Sample No. 2."

Earlier in their report, the APRO scientists expressed their surprise that the *Condon Report* had stated (based on as-cast grain structure of the Ubatuba magnesium) that "it therefore seems doubtful that this (Ubatuba) sample had been part of a fabricated metal object." The APRO report states: "Apparently, to the Condon Committee, castings are not fabricated metal objects. The authors believe that the entire foundry industry in the United States might take exception to this conclusion."

APRO is most pleased that, apart from the high purity of the magnesium, its unconventional structure has been examined by two competent scientists. We wish to thank and compliment Dr. Walker and Dr. Johnson for their efforts in this work. Their complete findings will probably be presented in book form in the near future. Further details will be given when available.

Readers versed in physical chemistry or metallurgy are invited to send their comments or opinions on these new findings to APRO.

SITU Donates UFO Reports To APRO

After being informed of APRO's computer project, Mr. Ivan T. Sander-son, Director of the Society for the Investigation of the Unexplained (SITU), decided to provide APRO with its many thousands of UFO reports as a contribution towards the project. A large portion of these reports pre-date 1947. SITU's UFO reports will be integrated with APRO's UFO reports in due course and many duplications will probably have to be weeded out.

Those individuals and organizations, both in the U.S. and abroad, who have not sent their reports in to APRO are requested to do so shortly so that the data for the computer catalog can be as complete as possible. APRO is interested in *all* reports of unidentified flying objects, regardless of their geographical location or date.

Send Address Changes!

Illinois —

(Continued from Page Four)

The couple differed in their opinion of how the thing left: Mrs. F. said that just before it disappeared it had the appearance of a car headlight turning to its left (her right), while Mr. F. said he did not notice this but just thought that it disappeared as if being shut off. Both agreed that the light was at the height of the top of the trees on either side of the dip in the woods, or about 50 feet above the ground. They also agreed that the light moved fairly slowly at all times. No object was seen behind the light although Mrs. F. mentioned something of a reddish glow or a short vapor trail. It was the conclusion of the investigators, after checking light sources in the area, that the Fs observed an unidentified flying object.

Official British UFO Statistics

APRO recently obtained the official Ministry of Defence (MOD) UFO statistics for Great Britain corresponding to 1959 through 1969. Reports catalogued by the British Government increased by about 300% in the last three years, as can be seen in the following listing.

| Year | Total Reports | Unidentified |
|--------|---------------|--------------|
| 1959 | 22 | 4 |
| 1960 | 31 | 3 |
| 1961 | 71 | 2 |
| 1962 | 46 | 3 |
| 1963 | 51 | 2 |
| 1964 | 74 | 5 |
| 1965 | 56 | 14 |
| 1966 | 95 | 5 |
| 1967 | 362 | 46 |
| 1968 | 280 | 22 |
| 1969 | 228 | 18 |
| TOTALS | 1,316 | 124 |

The total number of reports received by MOD in the United Kingdom (England, Scotland, Wales and Northern Ireland) between 1959 and 1969 was 1,316, compared to 6,430 reports received in the same period by the Defense Department in the United States. The population of the United Kingdom averaged almost 55 million while the population of the United States averaged just over 200 million.

In his communication to British APRO Field Investigator David Guyatt, Mr. L. W. Akhurst, a civilian charged with UFO public relations in the MOD Secretariat, stated that "we have found no evidence that they represent an air defence threat to the United Kingdom." As for inspecting the MOD UFO files, Mr. Akhurst stated that,

under the Public Records Act 1958, amended in 1967, these will not be available for public scrutiny for 30 years. The 1969 MOD UFO files, therefore, may be examined and analyzed by APRO in 1999.

Multiple Witness Occupant Sighting in Brazil

The greater percentage of occupant cases on file with APRO involve single witnesses and for this reason the following incident is considered to be unusually interesting. Mrs. Irene Granchi, APRO's Field Investigator in Rio de Janeiro, acting on the information contained in a news item, investigated and learned the following:

Three people, Mr. Aristeo Machado, 49, his wife D. Maria Nazare and Federal agent Aguiar, who is a friend of the family, watched an object about the size of a Ford Galaxie, land on the ocean about 1 kilometer from the shore at about 11 a.m. on June 21. The Machado home is perched high above Avenida Niemeyer and affords a sweeping view of the Atlantic Ocean. When the object settled down onto the surface of the sea, sea spray was thrown out on all sides. The witnesses first thought it was a boat in trouble and went to a nearby hotel to telephone the Maritime Police. However, the object floated another 100 meters closer to the shore and the three people were able to discern that it had a transparent cupola inside of which were clearly visible two beings in dark-grey overalls, wearing helmets. Both were smallish and thickset.

Mrs. Granchi investigated the case one week after it happened, at the same time of day and with the same lighting conditions. She took note that a motorboat going by at approximately the same distance from shore was easily seen, its passengers were noted, but no details were visible.

Further information gleaned by Mrs. Granchi included the fact that the object was reported to have a bright rotating light which changed from red to green to yellow. The object stayed on the surface of the water for between 30 and 40 minutes, after which it took off quickly in a low, long flight out to sea. Mrs. Machado said that while she waited for Mr. Aguiar to come back from the telephone she saw the object "relieve itself" of a yellow ball which proceeded toward the shore but was not floating for it was moving against the current and seemed to be powered by something underneath it. At one point the yellow ball relieved itself of another

object, which was bottle green in color and of uncertain shape. Mrs. Machado ran down the beach after the yellow object and pointed it out to some children but they all lost sight of it shortly.

To our knowledge this is the first sighting of a UFO with occupants which involved three witnesses and it is an important addition to our study of this facet of the UFO mystery.

Finns Observe UFO Occupant

K. Gosta Rehn, APRO's Swedish Representative has forwarded the following account of the observation of a UFO and its occupant by two Finns at 3:45 p.m. on January 7, 1970. The story initially appeared in a Finnish magazine and Mr. Rehn contacted the author and satisfied himself as to the credibility of the two men. The account:

The witnesses, Aarno Heinonen, 36, a forest worker, and Esko Viljo, 38, a farm worker, are active skiers and on the day in question they were on their way to the ski area to re-define the ski track after a fresh snow. Upon arriving at the opening in the wood they stopped for a short rest. There were no clouds, no wind, and twilight was beginning.

Both were startled to see a very bright light in the sky, coming from the north. It was enveloped in a luminous fog. No sound was heard at first and the "cloud" suddenly changed course, starting toward the two men while it gradually lowered itself. A humming sound was heard and became louder as it neared the skiers. The "cloud" was red-gray in color, appearing to pulsate while brooms of smoke were emitted from the top of the cloud, like smoke from chimneys. When it reached a distance of about 15 meters from the ground they could see that a round craft with flat bottom, and of shining grey metal was inside the cloud. It was approximately 3 meters in diameter and around the lower rim there appeared three round balls. From the center of the bottom part a pipe-like affair protruded, estimated to be about 2 centimeters long and 5 centimeters in diameter. The humming sound increasing, the object continued to approach the men.

The cloud appeared to be thinning out more and more and the craft stopped at about 3 or 4 meters from the ground. At this short distance the men could see that the object was round and as it was inclined toward them they could see the dome on the

(See Finns — Page Seven)

Finns —

(Continued from Page Six)

upper part. Heinonen was watching the reddish grey mist and said that suddenly he felt like something had seized him around the waist and pulled him backwards. He took a step back and at that instant noticed a creature was standing in the middle of the circle of light which issued from the "tube." The creature was about 90 centimeters in height, very thin with slender arms and legs and a waxy, pale face. No eyes were noticeable and the nose gave the appearance of a "hook." The creature was clothed in some sort of overall material looking light green in color. The feet were encased in boots of a deeper shade of green and white gauntlets covered his hands and arms to his elbows. Claw-like fingers clutched a black box. Out of a round hole in the box a yellow light was pulsating.

Viljo said that he didn't get an impression of clothing on the little figure but noted that he glowed "like he was made of phosphor." His head, Viljo said, was crowned with a conical helmet which appeared metallic.

The creature was in sight for only about 15 to 20 seconds, according to the two men. Then he turned and the opening in the box was directed toward Heinonen and the light which it emitted was brilliant and almost blinding. The red-grey mist began pouring down from the craft and big sparks were jumping from the luminous circle on the ground. The sparks looked like luminous staffs, one centimeter long and red, green and violet. They seemed to flow outward from the circle, quite slowly, and some of them struck Heinonen and he was surprised that he did not feel them.

The red fog shortly encompassed the creature and he was no longer visible. The light cone on the ground then appeared to be "sucked up" into the opening at the bottom of the object. Then when the red mist dissipated the whole object was gone. The two men stood there for 2 or 3 minutes and Heinonen, who had been closest to the object and the lighted circle, experienced an insensitive feeling along his right side. When he attempted to step forward his right leg crumpled beneath him. Viljo had to half-carry and drag his friend to his home which was located about 2 kilometers from the area where the object was seen.

Mr. Heinonen's mother, when questioned, revealed that when the men came home they pounded on the door



See Finnish Occupant story, this page.

and when she opened it they stood there, Heinonen leaning on Viljo. Viljo's face was swollen and red. Heinonen was ill, complaining of a backache, aching joints and a painful headache. He later vomited and in an interview with the writer of the article in the Finnish magazine, claimed that for a period of two months his urine appeared black in color.

Both men were examined by a doctor who stated that he had given them sleeping tablets because it was obvious to him that they were in shock. He attested to the complaints of Heinonen, but said that both men were so excited in telling their story that they were nearly incoherent and felt that they had encountered some kind of electrical phenomenon.

This quite possibly is one of those cases which will need to be dealt with in considerably more depth before it is understood. However, it is obvious at this time that the incident embodies several details which have been noted in previous accounts of encounters with UFOs. If further important information is available it will be published in a future issue of the Bulletin.

Engine Interference in Denmark

The London Express Service for August 18 carried the story of a policeman who photographed a UFO after the object apparently interfered with the function of his patrol car. Denmark's "Porsgrunns Dagblad" for August 15 stated that technicians were examining a film strip exposed by Policeman Ewald Mourup on the evening of the 13th. His story follows:

"I was driving in a radio-patrol car on the road to Sillerup, seven kilometers northeast of Haderslev. The time was about 10:50 p.m. When I drove down a hillside the engine stopped completely for no reason and the lights went out. I braked the car and drove off the road. Then the car was enveloped in a cone of light and it became very warm inside. I tried to call the police station on the radio which would not function, so I switched the release on the automatic camera in the car. While taking the photos the light cone disappeared vertically up into the air. It did not disappear immediately, but seemed as if it was pulled upwards."

The three photos taken by the auto-
(See Denmark — Page Eight)

Renew Now!

Denmark —

(Continued from Page Seven)

matic camera show completely black except for a small dot of light. Mourup said that the lights of the car came back on after the light in the sky had disappeared and when he got out of the car he saw nothing unusual.

Mourup claimed that another car came upon the scene shortly after the light left but he hesitated to stop it and ask the driver if he had observed the phenomenon for fear that the man would think he was drunk. He admitted that he himself had laughed at people who had claimed to have seen UFOs in the past.

The film has been delivered to the Strydstrup Air Station where the Danish Air Force has undertaken an investigation of the case. Thanks to our representative Finn Myhre for forwarding this interesting information.

APRO Members Sight UFOs

The amount of UFO activity being reported to APRO without benefit of press coverage indicates that a flap of some sort has been in effect since about the middle of June and the following two reports, emanating from long-time and trusted APRO members are examples of the many first-hand reports reaching headquarters. Mr. Dains is a Field Investigator for APRO.

On the night of the 29th of July Mr. and Mrs. Douglas Dains were returning to their home from a camping trip to Old Forge, New York. At 7:20 p.m. they noted that the power for the town of Waterville was out but they proceeded to the local store to make a purchase anyway. Upon returning to the spot they had picked for overnight camping they noted that the lights at the camp office were also out. At 8:45 p.m. there was heavy rain accompanied by thunder and lightning so they decided to break camp and drive straight through to Binghampston. They left the spot at 10:25 and when they were just outside of East Hamilton Mrs. Dains pointed out a bright object in the sky just southwest of them. Because of the low cloud cover and light rain they both thought it was unusual. They stopped just northeast of Poolville and they both observed the object through the passenger window of the car which was down at the time. The object then became dim and went out. Mr. Dains got out of the car and went around the rear to the passenger side of the car and asked for the flashlight. Mrs. Dains then got out the car also and

stood facing southwest where the object was last seen. Dains started flashing the light several times in that direction and the lighted object reappeared. He flashed the light several more times. The object was about the size of the head of a needle at arm's length. When lightning lit up the sky it was clear that the object was below the cloud cover. After flashing the light several more times the Dains' noted that the object became brighter and dropped from a 45 degree angle to a 30 degree elevation. At this time it appeared the size of a dime at arm's length. Mrs. Dains became upset and called her husband to get into the car which he did. As he got into the car the lightning flashed and Mrs. Dains got a good look at the object. It appeared as a dark ovoid object with a bright round orange light in the center. Dains did not observe the object at this time because he was busy getting into the car and "getting out of there."

Mr. Dains drove down the road searching for another car and the object followed. At the intersection where a road from Poolville joins route 12 he stopped a car and the man in it got out to observe the object also. At this time the object was at about 45 degrees elevation and about the size of a head of a match stick at arm's length. It moved up and down slightly but otherwise just hovered in one position. The man who observed with the Dains' gave them his name and address, then both cars left, but the object continued to follow the Dains car until they reached the far side of Sherburne, New York at which time it was in the northwest. They drove two miles south of Sherburne, decided to drive back and see if they could spot the object. The time was then 11:07 p.m. However, they did not spot the object again.

Mr. Dains noted the following observations about the incident: During the sighting the radio had a lot of static which it didn't have before the sighting. The town of Waterville had a blackout a few hours before. The object was observed for approximately 30 minutes, and seemed to be about 500 yards distant at the nearest point and about 1,000 feet high (estimates). As it followed the Dains car and a northbound car approached, the object would climb to a higher altitude and dim until the approaching car had passed, then would become bright again and come down to a closer vantage point.

One of the most recent sightings took place at Stratford, Connecticut at 7:30 p.m. E.D.T. on August 7, 1970 and was witnessed by Mr. Harvey B. Courtney and his daughter Donna, 15. Mr. Courtney is a member of APRO.

Mr. Courtney and Donna were seated on their front porch when she pointed out an unusual object in the sky. They were facing east. The object in question was cigar-shaped and lazily cruising along somewhat slower than a high-flying jet but it appeared to be much lower. Mr. Courtney instructed his daughter to go into the house and get binoculars from his bedroom. He thought the object was a jet but was puzzled by the absence of wings. Donna called down that she couldn't find the binoculars and he told her to look in the closet. A few moments later Donna appeared with the binoculars and handed them to her father. The binoculars are Zoom, 7X-12X, 40, manufactured by Swift and Company.

Looking first with the 7X and then quickly zooming to 12X Courtney still could not discern wings or stabilizer; just a short tail on top. With the binoculars he could discern a faint, white, misty exhaust and a black band which encircled the "fuselage." There appeared to be a slight separation in the middle of the band. The "exhaust" extended approximately 2 to 3 times the length of the object, out the rear.

Mr. Courtney then instructed his daughter to get the camera, but during the time it took for her to find it, the object changed color from a dull aluminum to brown, then a deep reddish brown. At the same time Courtney heard the sound of a propeller driven plane in the east. He did not notice any change in velocity during the object's color change. At this point Donna came out with the camera, Mr. Courtney took his eyes off the object to set the lens and when he looked up the object was gone. He said he couldn't believe his eyes; one moment it was cruising lazily along, the next second it had completely disappeared. He grabbed the binoculars and swept the whole southwest area where the object had been for about 2 or 3 minutes but nothing was visible.

Mr. Courtney feels that the object was a definite structured craft and unlike anything he had ever observed before. He also feels that the color change and the sound of the plane in the east had something to do with the quick disappearance.

Press Reports

The number of UFO incidents published by the news media appears to have increased in the second half of 1970 and we present here three typical cases. The Larned, Kansas incident is under investigation and hopefully the Prescott, Arizona incident will be investigated shortly.

Belgrade, Yugoslavia, July 10, 1970. Residents of the capital of Yugoslavia reported to news agencies that they had observed a red object which they estimated to be flying at a speed of between 400 and 600 kilometers per hour (240 to 370 miles per hour). A Yugoslav airline pilot also reported observing the object which he described as having the shape of a "prolonged" ball with flames rising vertically from its surface. His total observation lasted about one minute. The Belgrade Observatory said that the object was not sighted at that facility.

Prescott, Arizona, July 31-August 3, 1970. For four evenings, at about the same time each night, an object described as a light which changed colors from red to blue, proceeded in an erratic path across the skies above Prescott. A time exposure photograph was taken of the object and it shows the straight lines of star tracks whereas the curving line of the path of the object demonstrates its erratic flight path.

Larned, Kansas, 5 August 1970. Pawnee County Undersheriff Phil Atteberry informed the *Hutchinson News* that he had observed an object in the vicinity of the Larned State Hospital at about 11 p.m. Viewed through binoculars, it was merely a very red light with one flashing white light "on the front." It hovered, flew at high speed and generally presented the impression of erratic flight. No shape could be discerned around the light, however. Atteberry claimed that he had seen the same objects prior to the 5th of August.

UFO Reported by Heyerdahl Crew

United Press International carried a wire story on the 12th of June 1970 which reported that Thor Heyerdahl, the Norwegian sailor and adventurer who was crossing the Atlantic on his craft, Ra 2 had radioed a UFO sighting. Navigator Norman Baker, who sent the message via shortwave radio said the UFO moved across the horizon for several minutes and then disappeared in a "bright orange flash."

UPI queried the North American Air Defense Command at Colorado Springs, Colorado and was told that they doubted that the UFO could have been connected with a space shot and the officer who answered the query said that it "might have been a meteor."

Baker said that the sighting was made during the early morning hours on the 11th as Ra 2 made good headway in a voyage which had started in May from Safi in Morocco. Heyerdahl and his crew are trying to prove that ancient Egyptians could have crossed the Atlantic in papyrus boats bringing their culture to the Western Hemisphere centuries before Columbus discovered America.

It could be pointed out here that although no details of the shape or apparent size of the object in question were given in the news report, the duration of the sighting counter-indicates the possibility that it could have been a meteor. Attempts will be made through our Norwegian representative and other members in that country to obtain further details which will be published in the future if we are successful.

Children Sight Minute Creatures in Malaysia

Mr. Ho Sai-Yuen, APRO member at Selanger, Malaysia, has forwarded information concerning the alleged sighting of tiny, and in one instance "horned" Martians by young boys near their school at Bukit.

At this writing several of the boys at Stowell School claim to have seen the diminutive (3 inches tall!) creatures and one claims to have been injured. It all began on the 21st of August when 10-year-old K. Wigneswaran reported he had seen a tiny "man" with horns who emerged from his "space ship" which had landed in the blukar (vegetation) near the school. This creature, according to the boy, wore a yellow uniform and his four companions wore blue outfits. All five had their own "space ships." Young Wigneswaran claimed he tried to capture one of the little men whereupon the little fellow loosed a blast from his "space blaster" which resulted in a small red spot on the boy's right leg which he claims is a wound.

Something apparently did happen, because young Wigneswaran was found unconscious in the underbrush by prefects of the school and carried into the classroom. Other boys have allegedly seen the creatures since Wigneswaran's experience.

It is reported that the CID is interested and investigating the case and if more is available in the future this periodical will carry the details.

Book Review

By JERIEL DODGE*

CHARIOTS OF THE GODS?

By Erich von Daniken; G.P. Putnam's Sons, New York; \$5.95; index, bibliography; 178 p.

The author puts a question that has been with students of unidentified aerial phenomena from the beginning. His answer is unequivocal: yes, the fiery chariots in which gods and angels visited the Earth in Biblical and other ancient literature were spaceships, and the gods were astronauts. He suggests further that in many cases the visitors mated with terrestrial women, and their progeny became Biblical and other ancient folk heroes.

Noah is cited as an example. The kid was different; his mother was accused of infidelity, says von Daniken. But the celestial travelling salesmen responsible came back to tell the adult Noah how to build the Ark and what to do with it.

Von Daniken is at his best in reviewing the similarities and parallels among the Bible and contemporary or much earlier accounts in the literature and archaeology of such areas as Mexico, Peru, Easter Island, Egypt and the Middle East. He turns up cave drawings from desert Africa which undeniably suggest men wearing space helmets. He agrees with many others that the Pyramids in Egypt, Mexico and Yucatan were built to specifications provided by a scientifically advanced race of visitors from space. He argues that Sodom and Gomorrah got it with a nuclear bomb, and that Lot's wife dropped dead when she turned around and looked straight at the fireball. The only thing he neglects is the pillar of salt.

His whole point — well taken, of course — is that it's time to do a massive, world-wide correlation of the existing fragments of our ancient past and reassess the whole jumble in the light of our new knowledge of space and space flight. To better plan the future of mankind, he calls for a Utopian Archaeological Year.

He has some items that may be new to many Americans. One is the Piri

(See *Chariots* — Page Ten)

Chariots —

(Continued from Page Nine)

Reis map, found in the Topkapi Palace early in the eighteenth century among the effects of the Turkish admiral by that name. The map is believed to be very much older, possibly a far-removed copy of something very ancient. It depicts the Earth, centered on Cairo, as seen from space. The Americas are there, distorted by global perspective. So is the continent of Antarctica, the ice-buried shoreline of which has been determined only recently by electronic sounding. Another new bit is Jonathan Swift's description of the moons of Mars, written 150 years before their discovery by an American astronomer.

So the book is rewarding, if somewhat irritating in small ways. The dust jacket says von Daniken is Swiss, but that's all. The book first was published, presumably in German, in 1968, and the English version in 1969 in England and Australia.

The author is surprisingly casual in some areas. For one instance, he omits telling us when Adm. Piri Reis lived. For another, his bibliography of 80-some titles omits any mention of the late astronomer and explorer, M. K. Jessup, who ploughed much the same field in 1955 and 1957. Nor is there any mention of the late Swiss psychiatrist, Dr. Carl G. Jung, whose book on Flying Saucers in 1959 was at least tangential, exploring the psychological factors that come into play with the UFO phenomenon.

Von Daniken's treatment of UFOs and their implications is curiously brief. He gets around to it eventually and mentions several good encounters. He hasn't seen one himself, but does not doubt their existence. To him, they are merely one more manifestation of his central theme—that the Earth has been visited many times.

One of his assumptions is that the nuclear-armed intercontinental missile has produced comparative peace, that the Russians and the Americans are unlikely to blow up the world because suicide is involved. Well, he knows it; we all know it; but how well do the individuals with their fingers on the button know it?

Von Daniken argues that the development of space travel is absolutely essential. Man, he says, knows he must control his population growth, but won't do it in time. He must travel outward for more living room, more nuclear fuel. So, off we go into the wild blue etcetera with Wernher von Braun and the Rand Corporation.

It's rude to ask, but is everyone's antigravity belt properly fastened?

And, considering von Daniken's routine handling of the UFO problem, where has he been for the past 23 years?

Such questions are side issues. The point is that von Daniken gives us probably the most detailed popular survey of our curiously neglected past that has been provided to date. He says he wants to make people think, and he does.

*Jeriel Dodge is a long-time APRO member.

PLEASE NOTE

Would those members who would be interested in attending an Eastern UFO Symposium in the Baltimore area tentatively set for January 1971 please contact APRO Headquarters?

EDITORIAL

From time to time this office receives communications from members registering complaints concerning the non-delivery or late delivery of the Bulletin. With the mailing costs, Bulletin delivery is deferred by the Post Office, first class mailing naturally taking precedence. The Bulletin is mailed within the first 10 days AFTER the date of the Bulletin. For instance, the July-August issue is mailed between September 1 and September 10.

Another disadvantage of bulk mailing is that sometimes Bulletins are lost. In some instances one member will experience such inconvenience several times and is naturally upset about the situation. However, this office has no way of knowing that a Bulletin has not been delivered until we are notified whereupon a duplicate copy is immediately dispatched. But we ask that members do not register a complaint with this office until 15 days after the 1st of the month in which a particular issue is scheduled to be mailed. This ordinarily will give U.S. mailings sufficient time to reach their destination.

Another problem which we occasionally are confronted with is the suggestion that to support APRO's projects, the Bulletin should accept advertising. The APRO Bulletin is neither a commercial venture nor is it a "fan magazine." To accept one advertisement would automatically open up the doors to anyone who wanted to reach a select group and we would have an additional problem of determining which advertisements would meet our publishing standards. It is also felt that the membership is

primarily interested in aerial phenomena and associated subjects, and we have no guarantee that advertisements would increase revenue to the point that the Bulletin could be expanded to accommodate the extra space required.

Other suggestions which have come into headquarters from the general membership concern a greater emphasis on speculative articles. We do plan more presentations of this nature in the future, but prefer to limit our speculation to scientifically based theory, and articles of the nature presented by Dr. Harder in his regular column dealing with propulsion, which commences with this issue.

Another suggestion which has often been made relates to a possible "Letters to the Editor" column. This is an excellent idea but it has one drawback: the number of letters received would, because of APRO's size, be so large that we would have to be extremely selective in choosing letters for publication and in doing so some might feel that they were being overlooked or ignored. Therefore it has been decided to forego the "Letters" column and adhere to our policy of straight reporting for, after all, the purpose of the Bulletin is to inform.

Several members have suggested that each issue contain a chronological listing of reports received. This also is an excellent idea, but again space limitations prohibit such a feature. The number of investigated reports as well as press reports are so numerous, even in a "quiet" period, that too large a portion of the Bulletin would be taken up with such a listing and the overall opinion of the bulk of the membership is that it is preferable to emphasize a comparatively small number of detailed reports, thus giving a general picture of UFO activity around the world.

By way of a progress report, APRO is still gaining members and its investigative network is growing steadily, but the rate of membership dropout since the publication of the Condon Report has been excessive. This has been offset, to some extent by a steady new member gain, however, so that we are still able to operate within a frugal but established budget.

At this point we feel it is mandatory that all members and subscribers redouble their efforts to bring in new members and subscribers and whenever possible, give gift subscription to those individuals whom they know to be interested in the subject of UFOs.

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85712, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

TUCSON, ARIZONA — SEPTEMBER, OCTOBER, 1970

MAN BLINDED IN UFO ENCOUNTER

Cycle Chased In Colorado

We are grateful to Mr. George C. Wilson of Farmington, New Mexico for his investigation of the following incident which occurred near Cortez, Colorado on the night of the 13th of October, 1970:

At 8:45 p.m. Dale Kell, 17 and his friend, Diana Bard, were riding Dale's motorcycle on a dirt road several miles south of Cortez. A long, glowing oval or jelly-bean-shaped object rose out of the sagebrush about a hundred yards from the highway, approached the pair, then chased them for several miles. Frightened, the young people stopped at a house, hoping to get someone else to see the thing. When they stopped, the lights on the object, one orange and one white, went out and they could not see it anymore. They drove on to the Kell residence which is located about 5½ miles southwest of Cortez. They related their experience to Mr. and Mrs. Kell, after which Dale's parents and grandparents as well as two of the younger children (11 and 13) got into the family car and drove to the area described by Dale and Diana.

Upon arrival, they stopped the car and turned out the lights. Dale and Diana, behind them on the motorcycle, passed the car and drove up the road about a mile. At this time the occupants of the car watched as a glowing object rose from the ground some distance from the road and approached the motorcycle. Mrs. Kell started the car, turned on the lights and drove toward where Dale and Diana were, whereupon the object's light turned off and it was not seen again.

During the course of his investigation Mr. Wilson noted a few discrepancies concerning the condition of the sky (Mrs. Kell said it was overcast, Dale and Diana said the sky was clear and they could see the moon), and the general description of the object.

Dale described an orange-white object and was not clear as to whether this involved two lights on an object or an orangish-white object. Both agreed that the size of the object, however, was approximately that of a pickup truck (length) and that it was between 10 and 15 feet high. They also said that when the object chased them it lit up the roadway brightly that they were not even aware

(See Cyclist — Page Five)

The Eastern UFO Symposium

The following information has been provided by the Executive Committee of the Aerial Phenomena Investigating Group (APIGB) of Baltimore concerning the details of the Eastern UFO Symposium to be held in the ballroom of the Holiday Inn located at Lombard and Howard Streets in the heart of Baltimore, Maryland on January 23, 1971. The Symposium is being sponsored by APRO International and APIGB.

Proceedings will commence at 3 p.m. and the afternoon speakers will be Mr. Thomas Olsen, nuclear engineer employed at the Teledyne Corporation, Isotopes Nuclear Systems Division and Chief of the UFO Information Retrieval Center, Inc., and Theodore Spickler, Assistant Professor of Physics, West Liberty State College, Wheeling, West Virginia, both of whom are Field Investigators for APRO.

Mr. Olsen's presentation will be "Common Features of 160 Sighting Reports" and will feature slides. Mr. Spickler will address himself to the subject of the relevance of plasmas and ball lightning to the UFO problem; the title of his presentation will be "The Plasma Problem."

The Symposium will adjourn at approximately 5 p.m. for the dinner hour. There are three restaurants in the Holiday Inn and attendees should have no problem finding accommodations.

The evening session of the Symposium will commence at 7 p.m. at which time Mrs. Lorenzen, Secretary-Treasurer of APRO, Inc., will deliver her address titled: "After Condon." She will be followed by the featured speaker for the Symposium, Dr. J. Allen Hynek, Head of the Astronomy Department of Northwestern University and formerly consulting scientist to the Air Force's Project Blue Book. The title of Dr. Hynek's presentation was not known at press time but we are certain that his address will be a high point of the symposium.

Dr. Hynek's talk will be followed by a general question-and-answer period during which the four speakers will answer questions from the audience.

The fee for both sessions of the (See Symposium — Page Five)

Mrs. Irene Granchi, APRO Field Investigator in Rio de Janeiro, Brazil, has forwarded the following details of her investigation of a series of sensational incidents at the Barragem do Funil, a power plant of the Furna Electric Center at Itatiaia, in the state of Rio:

Almiro Martins De Freitas, 31, is married, has three children and is considered honest and dependable. He is employed as a patrol guard at the power plant and dam, which is considered a National Security location and therefore employees are carefully investigated and screened.

On the night of Sunday, August 30 at 9:45 p.m., De Freitas was at his usual post in the powerhouse near the precipice of the dam when he saw a row of at least fifteen blue and yellow lights and the beauty of the blue color impressed him very much. They appeared to come from apertures or "portholes" of elliptical shape and about a meter (40 inches) across.

After leaving the power-house he heard an explosion and the lights went off for a few seconds and it was then that he saw the object at a distance of about 50-60 meters (165-200 feet). He crawled along the dam closer to the object, finally arriving at a point approximately 15 meters (50 feet) from the object. The form behind the lights was a rectangle, much like a "flying wing."

His first reaction was one of fear and he wanted to flee, but the object was over the dam and he remembered that if the dam broke four towns and thousands of lives would be lost, so he kept on toward the object.

Then he drew his gun and fired a shot at the object, and the lights on it grew brighter and a noise like that of a turbine of a jet plane filled the air. He fired another round from his 38 double barrel.

At this time a bluish-silver ray shot out of the object (he couldn't determine the exact spot from which it issued — but it was either from under or to the side of the "portholes") and he felt great heat on his body and a feeling of prickling like "pins and needles." He closed his eyes and when he opened them later he could no longer see.

Subsequent questioning of De Freitas disclosed the following: The lights on the (See Encounter — Page Five)

THE A.P.R.O. BULLETIN

Published by the
AERIAL PHENOMENA

RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road
Tucson, Arizona 85712

Phone: 602-793-1825 and 602-326-0059
Copyright 1970

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

John Hopf, Photo-analyst

A.P.R.O. STAFF

International Director L.J. Lorenzen
Assistant Director Richard Greenwell
Secretary-Treasurer Coral E. Lorenzen
Membership Secretary Madeleine H. Cooper

CONSULTANTS

Aeronautics Rayford R. Sanders, M.S.M.E.
Astronomy Leo Vern Standeford, Ph.D.
Astrophysics Richard C. Henry, Ph.D.
Anatomy Kenneth V. Anderson, Ph.D.
Biology Robert S. Mellor, Ph.D.
Biophysics John C. Munday, Ph.D.
Biochemistry Vladimir Stefanovich, Ph.D.
Civil Engineering James A. Harder, Ph.D.
Computer Technology Vlastimil Vysin, Ph.D.
Exobiology Frank B. Salisbury, Ph.D.
Geochemistry Harold A. Williams, Ph.D.
Geology Philip Seff, Ph.D.
Linguistics P.M.H. Edwards, Ph.D.
Mathematics G.K. Ginnings, Ed.D.
Medicine Benjamin Sawyer, M.D.
Metallurgy Robert W. Johnson, Ph.D.
Metallurgy Walter W. Walker, Ph.D.
Oceanography Dale E. Brandon, Ph.D.
Optics B. Roy Frieden, Ph.D.
Philosophy Robert F. Criegan, Ph.D.
Philosophy Emerson W. Shideler, Ph.D.
Physics Rene' J. Hardy, Ph.D.
Physiology Harold A. Cahn, Ph.D.
Psychiatry L. Gerald Laufer, M.D.
Psychology R. Leo Sprinkle, Ph.D.
Radiation Physics Horace C. Dudley, Ph.D.
Religion Robert S. Ellwood, Ph.D.
Science Education A. Henry Swann, Ed.D.
Seismology John S. Deer, Ph.D.

REPRESENTATIVES

Argentina Guillermo Gainza Paz
Australia Peter E. Norris
Belgium Edgar Simons
Bolivia Fernando Hinojosa V.
Brazil Prof. Flavio Pereira
Britain Anthony Pace
Chile Pablo Petrowitsch
Colombia John Simhon
Costa Rica Rodolfo Acosta S.
Cuba Oscar Reyes
Czechoslovakia Jan Bartos
Denmark Erling Jensen
Dominican Republic Guionex Flores L.
Ecuador Col. Raul Gonzalez A.
Finland Kalevi Hietanen
France Aime Michel
Germany Capt. William B. Nash
Greece George N. Balanos
Greenland Joseph March
Guatemala Eduardo Mendoza P.
Holland D.J.H. Dreux
Hong Kong Alex Pezarro
Ireland Martin Feeney
Italy Roberto Pinotti
Japan Jun'ichi Takashi
Lebanon Menthir El Khatib
Malta Michael A. Saliba
Mexico Roberto Martin
New Guinea Rev. N.C.G. Crutwell
New Zealand Norman W. Alford
Norway Finn Einar Myhre
Peru Ermanno Maniero
Philippine Republic Col. Aderito A. de Leon
Puerto Rico Sebastian Robiou L.
Rumania Tiberius A. Topor
Sierra Leone Bernard J. Dodge
Singapore Yip Mien Chun
Spain Antonio Ribera
Sweden K. Gosta Rehn
Switzerland Dr. Peter Greola
Tasmania William K. Roberts
Thailand Donald A. Rode
Trinidad Eurico Jardim
Uruguay Walter Fernandez L.
Venezuela Askold Ladonko
Vietnam Paul G. Nichols

Newswires, newspapers, radio and television stations may quote up to 250 words from this publication, provided that the Aerial Phenomena Research Organization, Inc. for APRO, Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.

APRO Press Conference

On September 19, 1970, APRO held a press conference at its Alvernon Way office, at which the Scientific UFO Research Award (consisting of plaques and \$200 in cash) was given to Dr. Walter W. Walker and Dr. Robert W. Johnson (see July-August *Bulletin* for details). Both are Consultants to APRO in Metallurgy.

Dr. Walker accepted Dr. Johnson's plaque and Dr. Frieden, APRO Consultant in Optics, accepted the plaques for Dr. Ellwood and Dr. Hardy, both of whom received Honorable Mentions. The presentations were made by Mr. L.J. Lorenze, Director of APRO. Part of the press release will be reproduced below as it reflects APRO's current stand on the UFO problem (the first part of the release details the Ubatuba magnesium findings reported in the July-August *Bulletin*):

"... Up to the present, APRO has approximately 20,000 reports of UFO observations received from over 50 countries during the past 19 years. Correlations of these reports have indicated some patterns of intelligence behind UFO performance and behaviour. A project is currently underway to computerize all the existing reports, thus enabling more expedient acquisition of the various kinds of data and allowing far more comprehensive correlations.

"It is APRO's position that the UFO phenomenon is important enough to warrant a scientific and objective investigation, regardless of its nature or origin. Although the Ubatuba magnesium is a very strong indication of extraterrestrial origin for some UFOs, there is no absolute proof that this is the case.

"On the other hand, considering the age of our galaxy (the Milky Way), the number of probable planets bearing intelligent life with an advanced technology and the number of star-traveling civilizations, there is no reason why extraterrestrial intelligence could not visit us at this time. Although *homo sapiens* does not yet have the engineering capability to undertake inter-stellar travel, there are no known physical laws which would ultimately make inter-stellar travel impossible.

"It is therefore important that research on the extraterrestrial hypothesis be conducted, regardless of whether some believe this is "probable" or "improbable." APRO is bringing to bear the various scientific disciplines on the problem. Only in this way will answers be forthcoming."

The press conference was televised by KGUN-TV and KOLD-TV of Tucson and press coverage was given in *The Arizona Daily Star*, *The Arizona Daily Wildcat*, *The Tucson Citizen* (Tucson) and *The Phoenix Gazette* (Phoenix). During the

following week, Dr. Walker and Mr. Richard Greenwell appeared on The University of Arizona KUAT-TV to discuss the Ubatuba magnesium and UFO research, and Mr. Greenwell discussed the topics extensively on KTUC-RADIO and KOPO-RADIO.

Staff Member

Tours Western States

Experience has demonstrated the vital importance of personal contact between the central APRO office and individuals participating in APRO's various activities.

To this end, Mr. Richard Greenwell, APRO Assistant Director, convened a Field Investigators meeting and a meeting of the Committee for Computer Data Processing (CCDP) at the Costa Mesa home of Mr. Rayford R. Sanders, APRO Consultant in Aeronautics and Chairman of CCDP on August 16, 1970. Field Investigators from the Los Angeles suburbs and some from as far south as San Diego attended and various topics pertaining to APRO activities and general UFO research were discussed. Dr. Philip Seff, APRO Consultant in Geology, drove to Costa Mesa from Redlands to attend.

Mr. Greenwell also visited Field Investigators in Santa Barbara and met separately with Dr. Robert M. L. Baker and Dr. Robert M. Wood. Dr. Baker, of Computer Sciences Corporation, has agreed to analyze movie films for APRO and possibly assist in making recommendations in the APRO computer program. Dr. Wood, of McDonnell-Douglas Astronautics Co., was helpful in providing recommendations and opinions related to various APRO projects now underway, including the computer program.

Beginning August 21, Mr. Greenwell journeyed to New Mexico, Colorado and Wyoming, visiting Field Investigators Gary Kinemond and Dr. Kenneth Hessel, both of Sandia Laboratories in Albuquerque, and Dr. John S. Derr (APRO's Consultant in Seismology), of Martin Marietta Corp. in Denver. Dr. Derr has agreed to undertake a study of "earthquake lights" and UFO sightings reported before, during and after seismic activity.

On August 23, Mr. Greenwell and Dr. Derr attended a meeting at the home of Mr. Ken Steinmetz, APRO Field Investigator, in Denver. In Boulder, Greenwell met with Dr. David Saunders, Professor of Psychology at the University of Colorado and author of the book "UFOs? Yes!" They discussed the University of Colorado UFO Project (Dr. Saunders was a former Principal Investigator before being fired by Dr. Condon, the Project Director) and other areas of general search, including computer application to UFO reports, a subject in which

(See Staff - Page Three)

Staff —

(Continued from Page Two)

Dr. Saunders has been actively involved, in a private capacity.

Also in Boulder, Mr. Greenwell met with Dr. Joachim P. Kuettner, Head of the Advanced Research Projects of the Environmental Science Services Administration (ESSA), U. S. Department of Commerce, and his assistant, Mr. Vernon Zurich. Dr. Kuettner is Chairman of the American Institute of Aeronautics and Astronautics (AIAA) UFO Subcommittee, which has been studying the UFO problem for two years.

Dr. Kuettner expressed interest in the current state of APRO's activities and views were exchanged on the future of UFO research. The long-awaited AIAA statement on the subject should appear in *Astronautics and Aeronautics* before the end of 1970. (*The APRO Bulletin* will carry a report on the AIAA Statement after it appears).

In Fort Collins, Mr. Greenwell met with Mr. George Palos, a member of CCDP, and in Laramie he conferred with Dr. R. Leo Sprinkle (APRO Consultant in Psychology), Associate Professor of Psychology at the University of Wyoming. Dr. Sprinkle has been applying hypnotic techniques to UFO interviewing and has been studying and correlating cases involving alleged telepathic communications with "UFO crews."

APRO

Operating Procedures

From time to time members inquire about the inner workings of APRO so it has been decided to give a brief run-down of activities at Headquarters. Some members think of APRO in terms of *The APRO Bulletin*. However, APRO is not just a magazine or periodical. APRO is an organization. When one pays \$5.00 per year one is not merely subscribing to a bulletin but is *supporting a research organization*. Publishing the *Bulletin* is not the only function performed by APRO.

APRO's only source of income is the revenue from memberships and subscriptions. Every inch of space in the *Bulletin* and every other activity APRO conducts is paid for entirely by the \$5.00 annual membership dues, plus occasional donations from members and others.

Besides the *Bulletin*, which absorbs approximately 30% of APRO's total budget, there are the following expenses: office rent, lease of office equipment (copier, postage meter), purchase of office supplies, salaries, postage, telephone service and expenses involved in analyses of UFO residues, analyses and development of films and other related research.

APRO Staff members perform the following functions: Mr. Lorenzen: overall direction of the organization, outlining policy after consultation with other Staff members and the Board of Directors; Mr. Greenwell — general administration, coordination of research projects among Consultants, coordination of field investigations, public relations; Mrs. Lorenzen — coordination of field investigations, public relations, editing *The APRO Bulletin*, maintaining the APRO report files, keeping the Corporation's books, dispersing finances, opening, distributing and logging the mail; Mrs. Cooper — directs the membership department, answering inquiries pertaining to membership and processing new members; Mr. Richard Achzehner — handles translations of incoming foreign mail.

Mr. Lorenzen performs his tasks in the evenings and on weekends (without pay) as he is employed as an engineer at a local electronics manufacturing firm. Mr. Greenwell presides over the business office from Monday through Friday. Mrs. Lorenzen performs her duties from five to seven days a week, as needed, and receives no remuneration.

In addition to the above named staff members, APRO is assisted by the following part-time volunteer personnel:

Mr. Michael Bruno, Mrs. Helen Carroll, Mr. Thomas Gautier, Mrs. Lucinda Harris, Mrs. June Nuzik, Mr. John Phelps, Mr. James Stavem, Mrs. Charlotte Taylor and Miss Shao Thomas.

It is a continuing policy of APRO to increase the quality of the *Bulletin* contents, both in investigated, documented cases and in research or discussion papers. Also, speculative articles which tend to expand our understanding of the UFO problem will be published occasionally.

We call upon all members to support APRO and its activities and to assist by renewing at the appropriate time each year.

Lorenzen Books

This office frequently receives queries from the membership concerning which books the Lorenzens have written, their price and where they may be obtained. They are: "The Great Flying Saucer Hoax", privately published, hardcover, in 1962 and available in limited numbers directly from Mrs. Lorenzen at APRO's address. The price is \$4.45 postpaid.

The others are: "Flying Saucers - The Startling Evidence of the Invasion from Outer Space," published by Signet (No. T-3058) in soft cover in 1966 and priced at 75c. It is a revised version of the hard cover book "The Great Flying Saucer Hoax."

"Flying Saucer Occupants, (No. T-3205), Signet, 1967, 75c. "UFOs over the Americas," (No. T-3515), Signet, 1968 75c. "UFOs The Whole Story,"

(No. T-3897), Signet, 1969, 75c.

The latter four soft cover books can be ordered from your local soft cover book dealer or paperback department of your book store. If this is not successful order directly from New American Library, 1301 Ave. of the Americas, New York, New York, 10019, enclosing the name and number of the book and your remittance (check or money order — no cash) for \$1.00 to cover cost of the book plus handling and postage. THESE BOOKS ARE NOT AVAILABLE FROM APRO HEADQUARTERS.

Mrs. Lorenzen's new book, "The Shadow of the Unknown" which is a collection of information on various mysterious sky objects, sea mysteries, etc., will be published by Signet in November, 1970, No. T-4427. It also can be ordered from your local book store or directly from New American Library. Mrs. Lorenzen would like to apologize for the error made by NAL's copywriter on the cover of the book where she is described as "world-renowned psychic investigator," which she is not and does not claim to be. True, she has been interested in psychic phenomena for many years and the book contains some reports of psychic phenomena investigated by her, but it cannot be properly be called her specialty.

Follow-Up Reports

The following information has been received from Finn Einar Myhre, APRO's Representative in Norway, pertaining to the sighting of a UFO by the crew of Thor Heyerdahl's Ra (see the July-August *Bulletin* for details). Mr. Heyerdahl's new book "RA" has been published and it contains the following description of the object seen:

"That night we got a fright of a completely new nature. Norman woke me before the change of the guard at 30 minutes past midnight on June 30th. I sat up in my sleeping bag and began to put on my stockings as it was cold on the bridge. He called again, saying, "Come quickly, quickly. Look there!"

"I jumped out of the opening in the basket-wall with Santiago hurrying after me and we hoisted ourselves over the roof of the cabin looking in the direction Norman was pointing.

"Arising up over the horizon on the port side and in a north-westerly direction, a round disk, which never completely came up from the water, but grew and grew like a weird aluminum-colored giant moon on its way upward, partially hidden behind the sea-margin. It was like a compact nebula, lighter than the Milky Way and perfectly symmetrically round it grew in dimensions like a mushroom

(See Reports — Page Four)

Reports —

(Continued from Page Three)

without a stalk. It seemed as if it approached us, came sagging straight toward us as it extended constantly wider out into the sky. The moon was on the opposite side and the night was starlit and without a cloud.

"My first thought was reflection against a damp night sky from a huge 'beamer' (apparatus which throws lights or beams) behind the horizon. My next was a nuclear cloud caused by a human false step, or an aurora borealis phenomenon. But the feeling that it was a 'lighting shower of alien frames' which approached us from the universe prevailed until the disk covered about 30 degrees of the sky. Then it suddenly stopped growing, dissolved almost imperceptibly and vanished."

Heyerdahl then goes on to describe their shooting of rocket flares to indicate their position to the "CALAMAR." They made contact with the Calamar by radio and learned that their flares had not been detected nor had anyone been on deck when the illuminated disk appeared. The next morning Heyerdahl and his crew learned via a radio amateur on Barbados that the same phenomenon that had been seen from the Ra had also been observed from several of the West Indian Isles, but in a north-easterly direction."

Our second follow-up involves the front page banner story of the July-August issue involving the R. family of Apopko, Florida. Mrs. R., who since her sighting has become a member of APRO, informs us that her baby, age 2½ had the "dry heaves" (nausea and vomiting with no material brought up) all day after the sighting was made. For some time the baby, ordinarily quite a tranquil and cheerful little fellow, became cranky and irritable and is just now returning to his own usual cheerful self. Mrs. R. also said that her other son and she had terrible headaches beginning that night after the sighting, hers being described as the "worst I've ever had in my life." She says they have only subsided just recently and her son still has nightmares. The baby frequently wakes her up at night and asks that a light be put on. Neither of the children had been afraid of the dark before.

She concludes: "I couldn't tell you if it is from our experience or not. I can only say I never had trouble with Allen vomiting before or after, not even when he gets stomach viruses. He's always been easy to care for, an exceptionally good baby."

Our third follow-up report comes from Mr. K. Gosta Rehn, APRO's Swedish Representative who relays the following information about the Viljo-Heinonen case in Finland, also described (and illustrated) in the July-August issue of the

Bulletin.

Both men have suffered physical effects of their apparent encounter with the UFO. They have suffered difficulties with their balance, fatigue at the slightest effort, headaches, pains in the eyes which were swollen, gaps in their memory. Mr. Heinonen has experienced bad dreams and since the sighting seems to have confused the "little creature" with his friend Viljo of whom he is now afraid. The doctor who originally saw the two men was transferred to Helsingfors and the new doctor was very nonchalant about the men's complaints and symptoms and gave no credence to their account of the incident.

At this time we would like to correct an error in the original account; the article by Bo Ahlqvist was from a Swedish magazine (not Finnish as reported).

Three UFOs Over Missouri

On the 4th of October at 6:30 p.m. three unusual objects were viewed from the highway leading from Ursa to Quincy, Illinois. The witnesses are known to one of APRO's Field Investigators but do not wish to be identified. We will quote directly from the lady's report:

My husband, my daughter and I went for a ride up to Ursa and back to look at a lake we fish in. We were heading back to Quincy on a new bottom road west of Ursa. It was 6:30 p.m. and just beginning twilight. We were heading south and I looked out the window to the west and noticed these two objects just hanging in the sky. Dad stopped and we got out to watch and then saw a third one. They were very far off but there were no clouds or stars or anything else around them.

"Two were like red balls and the third looked like it was long and gray and at an angle (about 30 degrees from the horizontal — Ed.) We watched for about ten minutes, then the one closest to the long gray one started moving toward the one nearest the horizon. It passed under it and disappeared heading southwest. Then the greyish one started moving to the north and climbed very high leaving a very noticeable pinkish, short trail. We watched it disappear into the north.

"It wasn't long until the one nearest the horizon started moving. It climbed higher and higher, going north and then east and a definite short trail was behind it. It was terribly high but we watched until it disappeared into the northeast. After it started to move higher it did not appear red but was a definite moving object leaving a short trail. We watched from 6:30 p.m. until 7:05 p.m. No airplane could have sat as stationary as they were in the sky when we first saw them. The sky at the horizon was still colorful but the sun was down. Perhaps

the two lower ones were still in a position to catch the sun's rays which gave them the red color. It would be hard to say which state they were over because don't know how far one can see from here. It would have been at least Missouri or farther west. I do know we were fascinated and it was a very interesting spectacle.

Objects Viewed

At Hyannis, Mass.

Two off-duty part-time policemen observed four strange milky-white objects in a northeast to southwest passage over Hyannis, Massachusetts at 12:35 a.m. on the morning of August 7, 1970. One of the men, Mr. C., is a school teacher and does not care to be identified. The incident was investigated by APRO Field Investigator Raymond Rodriguez.

Mr. C. who was the first to spot the objects, was appalled at what he saw, as he had always been a skeptic about UFOs. His first impression was that children were playing with some type of bubble machine nearby. He abandoned this theory a split second later when he realized that the objects were going at a high rate of speed. He just had time to call them to the attention of his partner, Mr. F., so that the latter saw only two of the objects.

The objects were milky white in color, oval in shape, at first clearly defined and later hazy-appearing as they went out of sight. They passed overhead, one after another, and were estimated to be going at 200 or 300 miles per hour at an altitude of approximately 10,000 feet. Each object appeared to be about 1/2 inch in length (at arm's length) and were viewed for ten seconds by Mr. C. and for about 5 seconds by Mr. F.

The Bay City Michigan Incident

Various newspapers in Michigan carried the story of Roger Jayo, a young musician and automobile body repairman who claimed two UFOs had almost struck his car at 2:15 a.m. on October 10, 1970 while he was traveling on Highway M-15. APRO's Field Investigators were Mr. Clinton C. Williams Jr. and Fred Varner. Mr. Jayo reported to the Bay City police concerning the incident and after the basic information got into the newspapers and on local radio and television he was literally bombarded by telephone calls. The information:

Jayo was returning to his home in Bay City from a band engagement in C where he plays drums with a country and (See Bay City — Page Six)

Encounter —

(Continued from Page One)

object dimmed and brightened alternately in this manner: yellow, nearly white, scintillating blue, yellow, orangey, yellow, blue, and so on.

Other guards in the area also viewed the object and said De Freitas fired a third shot, screaming: "Don't look! Watch Out! The flash has blinded me!" All three bullets were heard as they ricocheted from something. When the others reached him, De Freitas could not move and they had difficulty getting him into the car to take him to the hospital.

Within fourteen days of the incident, after many tests and hypnotic questioning and treatment, De Freitas regained his sight. Prior to the hypnotic treatment De Freitas had had difficulty resting; afterward he slept and ate well and seemed rested and relaxed.

Mrs. Granchi succeeded in interviewing the doctor (Dr. Orlandino Fonseca) who treated Almiro, and who diagnosed the blindness as psychosomatic but nevertheless caused by a *real* experience. While at the Red Cross Hospital where he was ultimately taken after initial examination at the Aeronautics Hospital, Almiro was in the hands of security authorities and in isolation.

Other items of interest which are related to the Almiro Martins De Freitas case are the following:

At the point where the object allegedly hovered, which was newly poured and wet cement (and it had been raining heavily) the concrete had hardened and all around this area was a dry circle. Several days later the concrete at this spot was not only powdery but holes were evident.

The Ministry of Aeronautics announced on September 4, five days after the occurrence, that the case was under investigation and the results would ultimately be made public.

The area is under security guard and the cement where the object hovered is still rippled and cracked.

Almiro Martins De Freitas received a questionnaire from the National Aeronautics and Space Administration (U.S.) which was being completed by military authorities in Brazil. De Freitas was also personally closely questioned by the Brazilian Minister of War.

There were other UFO sightings in the area of Itatiaia, among which are the following:

A milk truck driver, Jose Norberto de Lima, who carries milk from dairies in Rezende and Itatiaia to Cruzeiro, Sao Paulo, has seen the apparition as described by De Freitas and the guards at Barragem do Funil so often that he has seriously considered quitting his job because of the ridicule which may result from making his experiences public.

Guards at Barragem have seen the object since De Freitas' experience and are literally in a state of panic.

On the third of September an object sporting "incandescent lights" approached the PAJEU Radio antenna emitting pink, blue and red lights and during its presence the station was off the air for a few moments. The tower controller had the presence of mind to turn the tower light off and on several times, whereupon the UFO left abruptly toward Pica de Carapuca, 12 kilometers away, where it was watched together with two other UFOs flying about the sky, by nearly all the residents of the town.

During the same time a country woman in Belo Horizonte State reported she had been chased by a UFO which gave off great heat on her back. It looked like a bluish-white lamp at about 50 meters distance (165 feet). As she ran from it, it rose into the air, changed color from bluish to orange. It followed her at a distance of 20 meters (65-70 feet) and finally disappeared. Two hours later the lady suffered a severe headache, visual disturbance and burns on her back.

On September 5th four guards at the Funil dam saw a UFO emitting lights at the same place where Almiro Martins De Freitas had his experience. Guards have been reinforced at the installation and have been instructed *not to shoot* at the UFO.

A subsequent sighting on September 6 by six guards at the Funil dam was of an object with red, yellow and green lights. It was observed while flying from mountain peak to mountain peak, flights fluctuating, and finally apparently landing beyond a river in the distance. Through his binoculars, Jose Antonio Silva discovered the shape of a squarish object much like a wingless aircraft.

We cannot thank Mrs. Granchi enough for her energetic pursuance of this case. And we might add that just such surveillance by the UFOs was predicted by the late Dr. Olavo T. Fontes, APRO's former Brazilian Representative. We do feel badly, however, about misguided souls, such as Walter Buhler of Rio de Janeiro who, for reasons not understood by rational researchers, characterized Dr. Fontes as an agent of the Central Intelligence Agency of the United States.

Symposium —

(Continued from Page One)

Symposium will be \$3.75, *dinner not included*. The symposium fee should be remitted to Eastern UFO Symposium, 7869 Charlesmont Road, Baltimore, Maryland, 21222, via check or money order *ono later* than January 10th, 1971.

Those members who wish to obtain accommodations at the Holiday Inn should do so as soon as possible, through their

local Holiday Inn which operates a telephone reservation system.

We would like to urge all members, Field Investigators and Consultants within a reasonable distance to attend this symposium. The Executive Committee of APIGB, consisting of Donald Ratsch, Gerald Blackwell, Al Graziano and Ben Knife have put considerable time, effort and financial investment into this project and your support will be greatly appreciated.

None of the speakers will receive honorariums, but the expense involved in organizing this Symposium is considerable so we hope the Eastern membership will support it to the best of their ability.

Cyclist —

(Continued from Page One)

of their own headlight being on. Mrs. Kell said that both of the youngsters were "scared white" when they arrived home after the initial experience.

While all of this was taking place, Steve Kell, 18½, the oldest of the Kell children, remained at home because he didn't believe his brother's and Miss Bard's story. But he did go outside to lie on the lawn and watch the sky. During his stay there a round, orange light came from behind the Kell house, passed above him, then went out of sight straight up into the sky. He said he had a "funny feeling," but was not frightened and went inside. Steve seemed to be the skeptic of the whole group, whereas the occupants of the car and Diana and Dale were completely convinced that something very unusual had happened.

Mr. Wilson checked the general area where the Kells said the object was seen with a geiger counter which registered no more than normal background radiation. The dogs at the Kell residence did not seem to be affected by the object observed by Steve.

Computer Program

APRO's Committee for Computer Data Processing terminated its study in September, as scheduled, and a proposal to several foundations is now being prepared by Mr. Smith, Technical Co-ordinator, Mr. Walter, Committee member and Mr. Sanders, Committee Chairman. Mr. Smith has offered to serve as full-time worker on the project, in Tucson or California, depending on the funding available. Meanwhile, APRO is negotiating with a large California company for free computer equipment use for the project. When further details on these matters are available, they will be published in the *Bulletin*.

Bay City—

(Continued from Page Four)

western dance band. He first spotted the objects when the first one was what he estimated to be about 100 feet in front of him. He said he was afraid it was going to strike his car. He compared them to streetlights, saying, "If you was to go underneath them at about, say, a hundred miles an hour, hundred fifty miles an hour, but have somebody turn it on when you got about a hundred feet from it, that's what it looked like."

"They were real bright in the middle, and a darker ring around the outside of that, and then around the outside of that again it was like - milky. But whole thing was iridescent. It was about three shades of green, there was a green, bluish-green to it. The whole thing. And it was distinct."

"--- The first one was the lowest ... The second one was a lot higher, and back, in back of that one. It was probably about a hundred feet (high)."

Jayo said he looked in the rear view mirror after they had passed overhead but saw nothing. He said he had no curiosity to stop and just accelerated his car and got out of there.

Apparently no sound was associated with the objects; however, Jayo's car engine may have blocked out any noise made by them. Jayo described at length his impression that the underside of the objects *only* was illuminated, drawing upon the comparison of a flashlight held vertically, whose illuminated lens could not be seen until the viewer descends below its level. He offered this angular relationship to account for his sudden observation of the close objects.

Another comparison he made was the following: as if a translucent white china dish were illuminated by a beam of light cast upward into its overturned bowl. Most light would reflect downward, but the contours of the dish itself would be defined by the milky light cast outwards. Both objects were the same shape and moving at the same rate of speed, and Jayo thought they might be disk-shaped. He also said he heard momentary static on his radio as they passed over the car.

Mr. Williams noted that Jayo's car has a tinted windshield of graduated dark blue-green, which may have accounted for some of the color of the objects.

Outside of being a genuine UFO (and what are they?) the objects seen by Jayo have only two other possible explanations: Plasmas or meteorites. The entire report will be turned over to the proper authority on APROs Consulting Staff and any subsequent comment will be published in the *Bulletin*.

Hospital Sighting

In Wisconsin

On the morning of October 5, 1970 at 4:00 a.m. a nurse's assistant answered the bell of a patient who claimed that there were "monkeys" swinging from the trees outside and sitting on the window edge. We have decided to keep this lady's identity secret as she is a busy mother of four and sometimes the resultant calls of overenthusiastic UFO researchers can cause quite a problem (see the Bay City, Michigan report for an example).

However, we will quote her report as given to Field Investigator A. J. Andropolis of Sturgeon Bay, Wisconsin:

"I work the night shift twice a week at Memorial Hospital as a nurse assistant. I went into one of the three-bed wards to answer a patient's bell at about 4 a.m., Monday, October 5, 1970. The patient was sitting on the edge of the bed and kept telling me he saw monekys swinging from trees and also sitting on the window edge. At this time I had not looked out the window. I told him to go back to sleep. He had rung the bell off and on for a long time and each time I had answered it. This last time is when he hold me about the monkeys. The drapes were closed, but he could have been looking out before I came in. I got the patient back in bed and covered up and from the angle I was at I could see a bright light coming through the side of the drapes. I went to the window and opened the drapes and immediately observed this balloon-like object with a diffused yellowish-green color and pulsating motion with a stream of intense white light protruding down from the object. I was so shocked and startled that I stood there paralyzed looking at this object for about 5 minutes.

"It started to move up and away and as it did, the color seemed to change to an orange glow around the outer edge of the UFO. By the time I came to my senses I finally called another nurse. When we got back to the patient's room, all that remained was the streak of light gradually fading out. I never even gave any thought or connection with the monkeys the patient told me about, and the UFO, until I talked to Mr. Andropolis. Mr. A. told me about the incident at the Sutton Farm near Kelly, Kentucky for comparison. This patient could have seen something but all I saw is what I told Mr. A. This patient was always seeing something anyway. He is a little senile and a bit peasy, so it could be he didn't really see anything at all!" Unquote.

Mr. Andropolis, who is an art teacher, made a drawing of the area where the object was seen, which was the back side of the hospital where the emergency

entrance is located.

Questioning revealed that the object seen by the Nurse assistant was about 100 feet from the hospital and about 20 feet off the ground. It appeared to be huge, and she estimated it to be 100 feet long (including the white light) and 32 feet in diameter.

Four New APRO Consultants

APRO is pleased to announce the appointment of 4 new Consultants in the fields of Geochemistry, Oceanography and Philosophy. Joining the Consultants Panel are Dr. Harold H. Williams (Geochemistry), Dr. Dale E. Brandon (Oceanography), Dr. Robert F. Creegan (Philosophy) and Dr. Emerson W. Shideler (Philosophy).

Dr. Williams received his B.Sc. and M.Sc. degrees in Geology at the University of Alberta, Calgary, Canada and the University of Calgary in 1965 and 1967 respectively. His Ph.D. in Geology, specializing in Geochemistry, was obtained at McMaster University, Hamilton, Ontario, in 1969.

A former Research Geologist with Gulf Oil Canada Ltd. and AMOCO Canada Petroleum Co. Ltd., Dr. Williams has investigated trace element distributions in reefs and related facies and has performed limnological and geochemical studies of the Great Lakes and other lakes in Ontario. He has extensive experience in analytical chemistry using most analytical techniques and will be an asset to APRO in future analyses of alleged UFO residues. Dr. Williams is currently a Consulting Geochemist, having formed his own company, Sunwapta Minerals Ltd., in Calgary.

Dr. Brandon received his B.S. in Geology at Wayne State University in 1965, and his M.S. and Ph.D. in Oceanography at the University of Michigan, Ann Arbor, in 1966 and 1970 respectively. He served in the U.S. Navy (1955-1961) as a radarman and has been employed by Dames and Moore, Chicago, as a Staff Geologist and was a Geological Research Diver in the Department of Meteorology and Oceanography, University of Michigan.

A member of the AAAS, the American Geophysical Union and the Society of Economic Paleontologists and Mineralogists, Dr. Brandon has done research on the ecological relations between invertebrates and sediments, the Great Barrier Reef off Queensland, Australia, micro-temperature salinity regimes around coral islands and sand cays and deep-sea bottom currents and sediment distribution. He is very interested in those cases involving UFOs crashing or disappearing into the oceans,

(See Consultants — Page Seven)

Consultants —

(Continued from Page Six)

as has been reported occasionally, and will conduct a study of this question for APRO. Dr. Brandon is currently a Senior Research Oceanographer with a major petroleum research laboratory in Houston, Texas.

Dr. Creegan received his B.A. at Marietta College, Ohio, and his M.S. and Ph.D. in Philosophy at Duke University, North Carolina. The author of numerous publications on philosophy and related fields, Dr. Creegan has been a Professor of Philosophy at Ohio University, Athens, the College of William and Mary, Virginia, and has taught psychology at Carlton College, Minnesota.

As a visiting Professor of Philosophy at The University of Arizona, Tucson, during the Summer of 1970, Dr. Creegan was able to visit APRO Headquarters on various occasions and productive discussions were held. Dr. Creegan is currently a Professor of Philosophy at the State University of New York, Albany.

Dr. Shideler received his A.B. at the University of Pittsburgh in 1937, his B.D. at the Chicago Theological Seminary in 1940 and his Ph.D. at the University of Chicago Divinity School in 1948. He has been a Professor of Philosophy and Religion at Hamline University, Minnesota, Carleton College, Minnesota, and Iowa State University. Dr. Shideler has conducted post-doctoral research in his field of religious philosophy in England, Taiwan, Japan, India and South East Asia, has published many papers and reviews and is the author of the book *Believing and Knowing: The Meaning of Truth in Biblical Religion and in Science*, Iowa State University Press, 1966.

A former President of the Iowa State University Chapter of The American Association of University Professors, Dr. Shideler is a member of the American Philosophical Association and the American Academy of Religion. He is now a Professor and Chairman of the Department of Philosophy at Iowa State University, Ames.



DR. DALE E. BRANDON
Consultant in Oceanography



DR. EMERSON W. SHIDELER
Consultant in Philosophy

Magnetic Fields and UFOs

by Dr. James A. Harder

This is the second in a series of articles by Dr. Harder, a Professor of Civil Engineering at the University of California, Berkeley, and a Consultant to APRO in Civil Engineering.

There have been many instances in which magnetic fields have been observed in connection with UFOs, and much speculation that in some mysterious way UFOs may be propelled or supported by either magnetic or sometimes "electromagnetic" fields. Since the Earth's field, something less than one gauss in strength, is so weak, there seems little likelihood that it could be used. This is particularly true when one considers that only the *gradient* in the field can be put to use, and that this is infinitesimal. We (until now) have never been able to produce a north pole without producing a south pole (through the use of electromagnets, permanent magnets, etc. which are all dipoles). Thus only when there is a gradient, or a changing field, can one of the two poles produce a preponderance of force over the other.

This is not to say that magnetic "uni-poles," either north or south, cannot exist; they have been postulated theoretically, and there are some very good reasons for believing that they will eventually be produced. They would take the form of sub-elementary particles (sometimes called quarks, and for which the name "dyon" has been suggested) that carry both an electrical and a magnetic charge. An application of quantum theory (see "A Magnetic Model of Matter" by Julian Schwinger, *Science*, v. 165, n 3895, August 22, 1969) suggests why such magnetically charged particles have never been found — the force which would hold two oppositely charged particles together is many times that which holds an atomic nucleus together. It is these forces which (theoretically) would hold three dyons together to form a neutron, proton, or electron. Such an

elementary dyon would be permitted an electric charge of $+e$, $-e$, $+2e$, or $-2e$, where e is one-third the charge on an electron. Similarly it is permitted a magnetic charge of $+m$, $-m$, $+2m$, or $-2m$. The magnetic charges, for the three dyons, must add up to zero; but the electrical charges need not.

However the excitement of these theoretical possibilities lies not so much in the possibility of forming a magnetically charged body which would be attracted towards either a north or a south pole as in the possibility of enormously more powerful electrical machinery. (Next issue: more on the magnetic model of matter)

Comments

on the Apache Junction Physical Evidence Case

by Dr. Robert W. Johnson

Dr. Johnson is Manager of the Crystal Division, Materials Research Corp., Orangeburg, N.Y. and is a Consultant to APRO in Metallurgy.

We are indebted to Dr. Walker for his careful analysis of the artifact in this case. As reported in his article appearing in the May-June, 1970 issue of *The APRO Bulletin*, the artifact had a core consisting of a wire made from an iron-manganese alloy. Around it was a layer of a fibrous, organic-base material. This in turn was covered with a cylindrical sheath which was found to be calcite, a form of calcium carbonate.

The composition of the wire core suggests a few possible functions: to conduct electricity, to affect a magnetic field by its own magnetic properties, to serve as a structural element, and possibly combinations of the above.

As a conductor, such an alloy has appreciable resistance. If designed as a conductor, then the resistance is intentional, since resistance of conductors is always minimized unless needed. Resistance wires are often used for heating. If that were the purpose here, the temperature to be attained would probably not exceed 300°C., because the sheath materials would probably degrade at higher temperatures. It could also have been intended as a resistance element present only to make the electrical circuit function properly, as a resistor in a TV set.

Iron-manganese alloys have some distinctive magnetic properties. Since magnetic effects have often been associated with UFOs, one is led to speculate that the magnetic property is the important one, if this did indeed come from a UFO.

(See Comments — Page Eight)

Comments —

(Continued from Page Seven)

But it is difficult to carry the speculation further, since we have no idea how magnetism is used in such vehicles. Also, the estimated magnetic field strength associated with UFOs is beyond the range attained in research on magnetic materials. A sheath would seem unnecessary for magnetic purposes.

The most puzzling part of the story of the artifact is that it melted part of the plastic box it was stored in, although presumably it didn't burn the fingers that placed it in the box. The means of energy storage to accomplish this is not evident from the description of the wire. For reasons given below, it is not explained by the sheath, either.

Dr. Walker has suggested that the calcite sheath may have been originally calcium oxide, which reacted with carbon dioxide in the air to form calcium carbonate, and in so doing evolved sufficient heat to partly melt the plastic box. One objection to that hypothesis is that calcium oxide should also have reacted with water vapor in the air to form calcium hydroxide, but no calcium hydroxide was found. Another is that the sheath undergoing such a reaction would probably crumble to powder because of the large change in volume that the material would undergo in that particular reaction. An example is the so-called "tin pest" by which tin objects can turn into powder in a cold environment due to a change of structure involving a large change in volume.

If we assume that the sheath started as calcite, we cannot invoke chemical heat of reaction as the cause of melting of the plastic. Actually, the chemical energy of reaction could melt the box only if it were released rather rapidly. But a rapid reaction could ensue only if there were a relatively high concentration of CO₂ as fuel for the reaction. At normal atmospheric concentrations of CO₂ the total heat would probably be dissipated over a long time, with only a slight rise in temperature. So it appears that the means of energy storage is not explained by the sheath, either.

One avenue for further study would be to expose a calcium oxide sample to the atmosphere (in Arizona, to match conditions of humidity) for a period of time and then analyze it. A second line of investigation would be a study of the magnetic properties of the alloy. This should be done not only in the conventional, accepted ways but also with an adventurous, "blue sky" approach. For example, the investigator might try to see if energy can be stored in the alloy magnetically. Many discoveries have been made by accidental events that would never have been done deliberately because "it just isn't done."

Two From Wisconsin

John M. Kelley, Field Investigator, has forwarded the following information about two sightings:

On November 8, 1967, Mr. and Mrs. James Dunn were driving to Sun Prairie, Wisconsin and as they turned onto Bailey and Nelson roads they saw an object directly in front of them at about 100 yards distance. Dunn stopped the car and got out and noted that the object was hovering about "two housetops high" and making no sound. They said it appeared to be a solid object with no wings or other protrusions and about the size of a piper cub plane with two white lights about the size of car headlights and very close together. The lights gave off no beams. Dunn got back in his car and drove slowly, observing the object which appeared to follow them. Becoming frightened they increased their speed to 90-95 miles per hour and the object stayed with them at a constant distance. As they neared Sun Prairie they noted the object had three or four small flashing red lights which appeared to be spaced about its outer edges. They were smaller than those of a plane. The white lights appeared to have gone off or the object had turned so that they were not in view.

When the Duns reached Main St. they saw the object veer to the left in the direction toward Madison. They continued down Main St., turned north on Bristol and when they reached MacArthur St. the object suddenly reappeared and followed them to the home of Dunn's sister. Mrs. Dunn went in and got her sister-in-law who came out and saw the object. During the next few minutes as calls to Truax Air Force Base and police were being made, the object disappeared. State Police escorted the Duns back to their home to get their daughter and baby sitter as they didn't want to stay at home that night. They thought they saw the same object again but couldn't be positive.

Three other couples, Mr. and Mrs. Francis Renz, Mr. and Mrs. Antone Renz and Mr. and Mrs. Robert Blakely also reported seeing the object at the same time - 9 p.m.

Our second sighting in that general area took place at 10 p.m. on the 8th of September 1970. Miss Denise Fritz and her friend Mike Butler were boating on Lake Monona, Wisconsin when they became aware of a lighted object approaching the Lake. They at first thought it was going to crash, but it stopped and hovered about 50 to 100 feet above some trees near a boat landing on Winnequah Road.

The object then beamed two bright lights at their boat. They swerved the boat a couple of times but the lights

followed them. They became frightened, went back to the pier as fast as they could with the lights following them. They didn't bother tying up the boat, ran into Denise's home. Denise said she was so frightened that she was shaking and crying for two hours after the incident. Miss Fritz described the object as oval but said she couldn't focus on it very well to be certain. It made absolutely no sound and neither of the young people felt it could have been an ordinary aircraft.

Four Monona women later reported they had been driving in a car at the corner of Bridge Road and Panther Trail when they spotted a lighted object which they first thought was a low-flying plane. They stopped the car and got out for a closer look, noting that the object was stationary. They couldn't make out a shape, they said, and the object took off immediately after they stopped the car.

The night was clear with the moon low in the northwest and there were some stars. The duration of the sighting by Denise Fritz and Mike Butler was 15 minutes.

Note New Subscription Rates:

In order to streamline office work it has been decided that subscribers will, in the future, pay the same amount for the Bulletin as members do. Please see box below for full information.

BULLETIN RATES

APRO Membership including Bulletin:

U.S., Canada & Mexico . \$5.00 yr.

All other countries . . . \$6.00 yr.

Subscription to Bulletin only:

U.S., Canada & Mexico . \$5.00 yr.

All other countries . . . \$6.00 yr.

Visitors to APRO

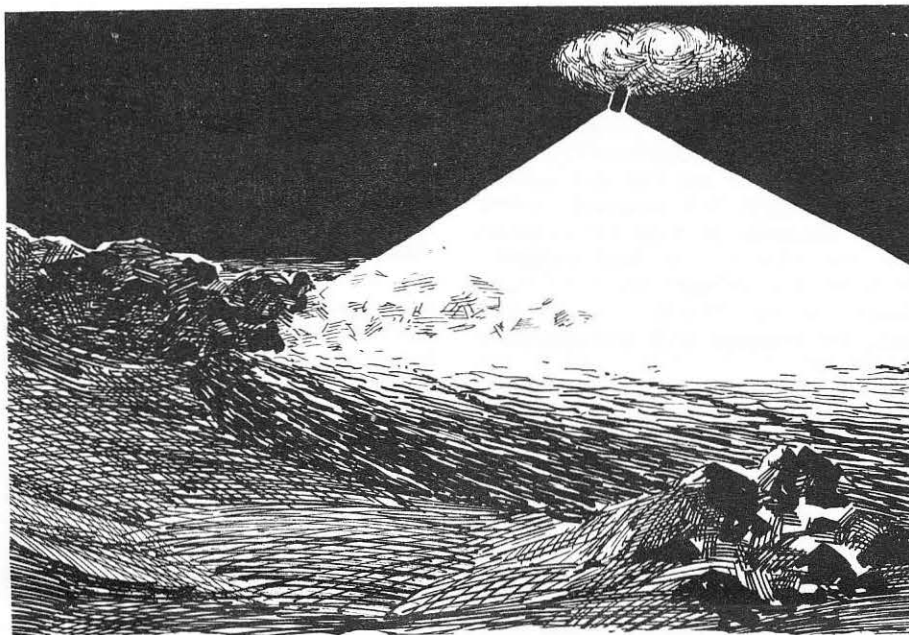
Recent out of State visitors to APRO have included Dr. Harold A. Cahn (Consultant in Physiology), Associate Professor of Biology at Utica College, Utica, New York; Dr. Robert F. Creagan (new Consultant in Philosophy), Professor of Philosophy at the State University of New York, Albany; Mr. William Pitts, Field Investigator in Fort Smith, Arkansas; Mr. David Akers and Mr. David Mischke, Field Investigators from Seattle, Washington; Mr. Laird S. Carter, Field Investigator in Peoria, Illinois; Mr. T. Phillips, Field Investigator at Sedalia, Missouri.

THE A.P.R.O. BULLETIN

The A.P.R.O. Bulletin is the official copyrighted publication of the Aerial Phenomena Research Organization Inc. (A.P.R.O.), 3910 E. Kleindale Rd., Tucson, Arizona 85712, and is issued every other month to members and subscribers. The Aerial Phenomena Research Organization Inc., a non-profit corporation established under the laws of the State of Arizona and a federally recognized scientific and educational tax-exempt organization, is dedicated to the eventual solution of the phenomenon of unidentified flying objects. Inquiries pertaining to membership and subscription may be made to the above address.

TUCSON, ARIZONA — NOVEMBER, DECEMBER 1970

OBJECT OVER GULF OF CALIFORNIA



Artist's rendition of the Cholla Bay incident by Lloyd Brewer

The following report is an example of the importance of field investigation in UFO research. The initial report was carried in a Phoenix paper and contained several errors. Mr. Lloyd Brewer, APRO Field Investigator, was asked to interview the one man who was mentioned. This interview yielded the information that many other people had observed the object, and the investigation is, in fact, continuing. The following is the testimony of two of the witnesses:

Mr. Albert Formiller, a retired Chicago policeman and a resident of Phoenix, about 70 years old, was at Cholla Bay, Mexico on the 5th of November. At about 9 o'clock, he said, he was startled to see that suddenly the ground and ocean were "lit up like daylight." He had been camped on the beach all day and was leaning against his pickup-camper about 25 feet from the water's edge.

Formiller could make out a beam coming from the sky but at first could not discern what it was coming from. Within a few seconds, however, he could make out the object itself, which was greyish-white, oval, and with a black or dark-colored tube, 12-16 inches in diameter, just to the left of center of the object and tilted to the left at a 5-10 degree angle from the vertical. Formiller said the object was cloudlike and appeared to "roll around" very slowly. Occasionally, he said, parts of it would billow out but never separate from the main body of the "cloud." No sound was heard.

At first the "searchlight" illuminated approximately ½ mile of the water and a small portion of rocky headland to the left of the witness. Almost immediately after he spotted it, however, the lighted area narrowed to a diameter of about ¼ mile. This lighted area and the beam fluctuated between 50 and 150 feet from the shore.

Shortly thereafter, the searchlight went out and a white light, weaker than the searchlight and described as a glow, illuminated the upper half of the object so that the underside could no longer be seen. Then the white glow disappeared and the object made a 180 degree turn, affording Formiller (because of its slight upward tilt) a view of the top and side of the object as it turned. This enabled him to observe a green glow or light that

Object Over Illinois Farm

Arthur J. Epstein and Joseph Gurney were the Field Investigators in the following incident which took place at 4:15 a.m. on October 5, 1970 on a dairy farm one mile east of Walsh, Illinois. The witness does not wish to have his name published.

At the time and date mentioned above, Mr. S. had turned on the lights which illuminate the yard where the cows stand before going into the milking shed. The yard is a cement affair. He walked over to put some feed in a feed bin about fifty feet from a sixty-five-foot high silo. He glanced up to see a light beam in a circular shape which had a red, fuzzy "neon" look. It appeared to have fog around it. At first he thought it was the moon but then remembered that there was no moon that night. There was a beam of light like a searchlight which appeared as one line going from top right to bottom left, right through the center of the red circular light. The whole sighting lasted about two to three minutes. Toward the end of it, a third beam of light, which was focussed directly on Mr. S. for about three seconds, seemed to come from the center bottom of the

(See Illinois — Page Three)

Mass Sightings In Brazil

On Tuesday, November 24, 1970, Mrs. Irene Granchi, APRO's Field Investigator in Rio de Janeiro, Brazil, received a call from her son Ludovico at his home at Itacuruca, State of Rio, which turned out to be the first in a series of sightings within a short space of time which spanned three states in Brazil.

Ludovico Granchi and others had viewed the object at 7:08 p.m. Shortly thereafter, Mrs. Granchi received another call from her son-in-law Jose Augusto, calling from a friend's home in Tijuca, where at 7:20 p.m. the lady of the house and practically everyone in the district had watched an unusual object which traversed the sky within the period of two minutes. While others watched the object, Jose Augusto was watching TV and noticed pronounced interference on the set. All of those at the home where Jose Augustowas visiting were UFO skeptics until they observed the object.

Mrs. Granchi set about to investigate the series of events, and contacted newspapers and radio and television stations to inquire concerning any calls they had received. She learned that they had received hundreds of calls which, if a

(See Brazil — Page Three)

(See Gulf — Page Three)

THE A.P.R.O. BULLETIN

Published by the

AERIAL PHENOMENA

RESEARCH ORGANIZATION, INC.

3910 E. Kleindale Road

Tucson, Arizona 85712

Phone: 602-793-1825 and 602-326-0059

Copyright 1970

Coral E. Lorenzen, Editor

Norman Duke, Richard Beal, Artists

A.P.R.O. STAFF

International Director L.J. Lorenzen
 Assistant Director Richard Greenwell
 Secretary-Treasurer Coral E. Lorenzen
 Membership Secretary Madeleine H. Cooper

CONSULTANTS

Aeronautics Rayford R. Sanders, M.S.M.E.
 Astronomy Leo Vern Standeford, Ph.D.
 Astrophysics Richard C. Henry, Ph.D.
 Anatomy Kenneth V. Anderson, Ph.D.
 Biology Robert S. Mellor, Ph.D.
 Biophysics John C. Munday, Ph.D.
 Biochemistry Vladimir Stefanovich, Ph.D.
 Civil Engineering James A. Harder, Ph.D.
 Computer Technology Vlastimil Vysin, Ph.D.
 Electrical Engineering Kenneth Hessel, Ph.D.
 Electrical Engineering Lorin P. McRae, Ph.D.
 Exobiology Frank B. Salisbury, Ph.D.
 Geochemistry Harold A. Williams, Ph.D.
 Geology Philip Seff, Ph.D.
 Linguistics P.M.H. Edwards, Ph.D.
 Mathematics G.K. Ginnings, Ed.D.
 Medicine Benjamin Sawyer, M.D.
 Metallurgy Robert W. Johnson, Ph.D.
 Metallurgy Walter W. Walker, Ph.D.
 Oceanography Dale E. Brandon, Ph.D.
 Optics B. Roy Frieden, Ph.D.
 Philosophy Robert F. Creagan, Ph.D.
 Philosophy Emerson W. Shideler, Ph.D.
 Physics Rene' J. Hardy, Ph.D.
 Physiology Harold A. Cahn, Ph.D.
 Psychiatry L. Gerald Laufer, M.D.
 Psychology R. Leo Sprinkle, Ph.D.
 Radiation Physics Horace C. Dudley, Ph.D.
 Religion Robert S. Ellwood, Ph.D.
 Science Education A. Henry Swann, Ed.D.
 Seismology John S. Deer, Ph.D.

REPRESENTATIVES

Argentina Guillermo Gainza Paz
 Australia Peter E. Norris
 Belgium Edgar Simons
 Bolivia Fernando Hinojosa V.
 Brazil Prof. Flavio Pereira
 Britain Anthony Pace
 Chile Pablo Petrowitsch
 Colombia John Simhon
 Costa Rica Rodolfo Acosta S.
 Cuba Oscar Reyes
 Czechoslovakia Jan Bartos
 Denmark Erling Jensen
 Dominican Republic Guarionex Flores L.
 Ecuador Col. Raul Gonzalez A.
 Finland Kalevi Hietanen
 France Aime Michel
 Germany Capt. William B. Nash
 Greece George N. Balanos
 Greenland Joseph March
 Guatemala Eduardo Mendoza P.
 Holland D.J.H. Dreux
 Hong Kong Alex Pizarro
 Ireland Martin Feeney
 Italy Roberto Pinotti
 Japan Jun'ichi Takanshi
 Lebanon Menthir El Khatib
 Malta Michael A. Saliba
 Mexico Roberto Martin
 New Guinea Rev. N.C.G. Crutwell
 New Zealand Norman W. Alford
 Norway Finn Einar Myhre
 Peru Ermanno Maniero
 Philippine Republic Col. Adérito A. de Leon
 Puerto Rico Sebastian Robiou L.
 Rumania Tiberius A. Topor
 Sierra Leone Bernard J. Dodge
 Singapore Yip Mien Chun
 Spain Antonio Ribera
 Sweden K. Gosta Rehn
 Switzerland Dr. Peter Creola
 Taiwan Joseph March
 Tasmania William K. Roberts
 Thailand Donald A. Rode
 Trinidad Eurico Jardim
 Uruguay Walter Fernandez L.
 Venezuela Askold Ladonko
 Vietnam Paul G. Nichols

Newswires, newspapers, radio and television stations may quote up to 250 words from this publication, provided that the Aerial Phenomena Research Organization, Inc. (or APRO), Tucson, Arizona, is given as the source. Written permission of the Editor must be obtained for quotes in excess of 250 words.

AIAA Releases UFO Statement

The American Institute of Aeronautics and Astronautics (AIAA) UFO Subcommittee, formed in 1967, has published its long-awaited statement in the November issue of *Astronautics and Aeronautics*, journal of the AIAA.

As expected, the AIAA Subcommittee took a middle line, accepting the fact that there is a UFO problem but not accepting the extraterrestrial hypothesis (ETH) — or any other hypothesis for the moment. The Subcommittee found the UFO problem "buried in what appeared to be a maze of preconceptions, emotions, bias, hasty conclusions, and excessive and misleading publicity." It criticized the National Academy of Sciences' statement that the ETH is "the least probable" explanation when endorsing the *Condon Report*, saying: "There is no scientific basis for assessing such probabilities at this time."

After discussing the *Condon Report* and its implications, the Subcommittee statement continues: "Taking all evidence which has come to the committee's attention into account, we find it difficult to ignore the small residue of well documented but unexplainable cases which form the hard core of the UFO controversy." It then goes on to compare the "hard core" UFO cases with other forms of controlled and uncontrolled laboratory data and points out that various members of the Subcommittee are familiar with uncontrolled laboratory research, such as is found in the study of the Earth's atmosphere.

The Subcommittee found "no basis" for Dr. Condon's prediction that nothing of scientific value will come of UFO research. A phenomenon which contains 30% unexplained incidents "should arouse sufficient scientific curiosity to continue its study."

"The issue seems to boil down to the question (the statement continues): Are we justified to extrapolate from 0.99 to 1.00, implying that if 99% of all observations can be explained, the remaining 1% could also be explained; or do we face a severe problem of signal-to-noise ratio (order of magnitude 10-2)? In the opinion of the subcommittee, this question must be asked critically and objectively in each individual case. In those cases which do not fit the extrapolation alternative, the further question should be explored: 'Are there common attributes to these cases?' It appears to the committee that the University of Colorado group has made no serious attempt in this direction."

The Subcommittee rejected the proposition of some scientists, including many in APRO, that UFO research deserves full

support, considering the possibility of the ETH, but likewise rejected the reasoning of those in the opposite band who claim that the ETH must be proven before the UFO problem can be studied. It found that "a better criterion for support of UFO related studies" was Dr. Condon's statement (in the *Condon Report*) that "clearly defined, specific studies ... should be considered and supported."

The Subcommittee then discussed the ETH, expressing its "disenchantment" with it "since there is not sufficient scientific basis at this time to take a position one way or another." At the same time, it found no "convincing basis" in Dr. Condon's statement that the Earth will not be visited by extraterrestrial intelligence for the next 10,000 years. "When does one start counting?" the Subcommittee asks!

Following the above, it expressed its "feeling" that the ETH, "tantalizing as it is," should not be brought into UFO consideration "as it introduces an unassessable element of speculation." However, the Subcommittee also "feels strongly" that: "... from a scientific and engineering standpoint, it is unacceptable to simply ignore substantial numbers of unexplained phenomena and to close the book about them on the basis of premature conclusions."

In considering how to attack the UFO problem and avoid previous pitfalls, the Subcommittee expressed little confidence in either a short-time team approach, as attempted at the University of Colorado, or the efforts of a single individual. Instead, it recommended a "continuing, moderate level effort with emphasis on improved data collection by objective means and on high-quality scientific analysis." The statement continues: "An economically and technically sound approach involving available remote sensing capabilities and certain software changes will require some thinking on the side of the aerospace engineering community. Proposals along this line are already in the hands of the subcommittee. The financial support should be kept at a moderately low level (it is estimated that a small fraction of the costs of the University of Colorado study is required initially) until reevaluation of the situation allows another assessment."

The Subcommittee then went on to recommend that government agencies "consider sound proposals in this field without bias or fear of ridicule and repercussion" calling it "... perhaps our most important conclusion." The final recommendation of the Subcommittee was that the USAF UFO files be handed over to a civilian agency ("either government or university"). A similar recommendation was made a year ago by a group of scientists, headed by an astronomer

(See AIAA — Page Four)

Gulf —*(Continued from Page One)*

extended 1/3 of the distance around the object on each side from a central point on what he took to be its "back." Again the top was illuminated and the bottom was not visible and the object began to move away. Formiller estimated the speed to be less than that of a jet, and it maintained a steady speed until it disappeared from sight into the west. Formiller made the logical assumption that the object must have been or at least could have been seen from San Felipe, Baja California, which is across the Gulf of California to the west.

There seem to be quite a number of supporting witnesses to the Cholla Bay incident and Mr. Brewer is continuing his investigation. However, we will include here the testimony of Norman Norris, retired policeman (20 years with the Phoenix Police Department) who, with his brother-in-law and his wife, Mr. and Mrs. Grady Hendricks, were driving to Cholla Bay and travelling south or southwest when they saw the object. Norris, who was sitting in the front seat, was the first to spot the object. His immediate reaction was that it was a streetlight but he soon realized that it could not be. Although the object made no apparent movement, it "may have" become brighter and then began moving, since it began to grow dimmer. As the object neared the horizon a blue-green "vapor trail" that followed in the apparent path of the object became visible.

Norris' description of the object varies slightly from that of Mr. Formiller in that he describes it as a white, oval-shaped light with a hazy, dark-colored rim running horizontally around its middle. He said its estimated apparent size was that of a silver dollar held at arm's length, and estimated actual size he felt was 30 feet in diameter.

The Norris observation lasted approximately 10-15 minutes during which no sound was heard (the windows of the car were rolled up). The Norris group were about 12 miles northeast of Pelican Point on the road to Cholla Bay.

Inasmuch as the Norris party was able to view the object from that distance, it is quite likely that the object may have been observed from Puerto Penasco (Rocky Point), which is a popular fishing and vacationing area about 250 miles from Tucson, Arizona. One of APRO's Field Investigators who is in charge of a land development project at Rocky Point, will continue the investigation at that end and any further information about this interesting case will be published in a future issue of the *Bulletin*.

We are indebted to Mr. Brewer, who is an art teacher, for the initial investigation as well as the sketch of the sighting.

Brazil —*(Continued from Page One)*

fraction of the actual witnesses, indicates that probably thousands of people witnessed the passage of a single object. Mrs. Granchi herself received over 100 calls, most of which she was unable to pursue because telephone trouble caused the phone to ring but when she answered the line went dead. One call which came through, however, was from an acquaintance, Benicio Guimaraes who reported that his brother in Santo Antonio de Padua, state of Rio, had seen a bright yellow UFO at 7:10 p.m. that night and that a UFO had also been seen at Porto Novo do Cunha at 7:18 p.m. In both cases the object was observed by the whole population of the area. Mrs. Granchi observed:

"What is striking about this case is the sequence of correct annotations of sighting hours — as if to make us believe there was in fact a sequel of the same UFO — but the very fact that people of different towns, districts and states all having noticed the time is so suspicious, for it is unusual. To wit:

7:00 p.m.: Belo Horizonte and State of Minas Gerais; towns with partial blackouts. This was the biggest sighting of all according to the newspapers of the next day.
 7:08 p.m.: Itacuruca, State of Rio
 7:09 p.m.: Santo Antonio de Padua (State of Rio)
 7:10 p.m.: Jardim Botarucu, Lajoa Leblon Ipanema (Rio)
 7:10 p.m.: Campo Grande
 7:18 p.m.: Porto Novo do Cunha
 7:20 p.m.: Botofojo-Tijuca (Rio)" Unquote.

Mrs. Granchi's son visited her a day later and she took his testimony and that of a fisherman at the island. The object was generally described as a domed object with a beam projecting upward, like a mercury vapor lamp, about the size of the moon, with the top portion being somewhat cloudy in appearance.

The solitary and bizarre nature of this occupant report suggests that it may be a product of mental aberration and may or may not have any connection with the other coincident object reports but it would seem unwise to ignore a given case simply because it is weird.

Further study of the details indicated that twenty towns in the state of Minas Gerais were visited by the UFO, Belo Horizonte suffered a blackout and there is an outstanding occupant case. In the state of Rio, starting with Ludovico's sighting in Itacuruca, there was one in Caxias, another in Paraiba do Sul, Santo Antonio de Padua and Porto Novo do Cunha. In Rio de Janeiro the object was seen at Campo Grande, Lagoa, Jardim

Botanico, Leblon, Ipanema and Tijuca. Except for the Minas sightings, the others were all referred to Mrs. Granchi personally either through witnesses or direct accounts.

The general description of the object in all accounts was that of a cloud emitting rays from the top, the "cloud" being compact and giving the impression of a physical or solid body behind it. (See the Cholla Bay incident, this issue). Some saw two "clouds" and lights; others, like the fisherman on Itacuruca Island, saw the body of the object with a light emanating from the window or port sideways from the object.

The occupant sighting involved one Moyses Santos of Belo Horizonte, who found himself surrounded by a half dozen 1 meter (about 40 inches) tall beings in his home who went around touching and upsetting everything and who "lit up in many lights" as they neared a table lamp (reflecting light?). They drifted about suspended in mid-air, and when away from the lamp, looked like ice. They finally disappeared *through the walls*. This incident took place as the UFO was passing over Belo Horizonte. Another effect of the passage of the UFO was the stalling of a bus which was loaded with passengers.

The one main and very odd detail of the occupant case was that one of the beings handed Moyses a paper on which he drew a flying saucer, without knowing why he did it, and then the little being took the paper back and went off with it. Moyses got outside before the UFO left and saw that it flooded his home and the area with brilliant light.

Mrs. Granchi will submit a more detailed report as information is available and a follow-up article will be published in a later issue of the *Bulletin*.

Illinois —*(Continued from Page One)*

UFO. He said he was standing in a circle of light about four feet in diameter. He could see the sides of the beam were perfectly straight. There were no other colored lights or moving lights. No sound accompanied the sighting and the cattle were not disturbed.

The UFO disappeared from sight by fading out. It had been about 25-30 feet above a tree which measured about 75 feet high. Mr. S. compared the object or light to the size of a volley-ball held at arm's length.

It was noted that five cows were on the other side of a three-strand electric fence, one strand of which was broken. No one was able to ascertain how the cows had gotten to that side of the fence.

AIAA —

(Continued from Page One)

mer (Dr. Thornton Page), who presented papers at the UFO Symposium of the AAAS in Boston. If a decision is being considered, it has not yet been revealed by the government. The Air Force Blue Book files are now in the historical archives at Maxwell AFB in Alabama.

The AIAA Subcommittee is formed by the following scientists and engineers: Dr. Joachim P. Kuettner (Chairman), Mr. Vernon Zurich (Secretary) and Mr. Murray Dryer, all at the Environmental Research Laboratories of the new U.S. Department of Commerce agency National Oceanic and Atmospheric Administration (NOAA), formerly ESSA; Mr. Jerald Bidwell of Martin-Marietta Corp., Mr. Glenn A. Cato of TRW Systems, Mr. Bernard N. Charles of Hughes Aircraft, Dr. Howard D. Edwards of the Georgia Institute of Technology, Dr. Paul MacCreedy of Meteorology Research Inc., Mr. Andrew J. Masley of McDonnell-Douglas Missile & Space Systems Division, Mr. Robert Rados of NASA's Goddard Space Flight Center and Dr. Donald M. Swingle of the Army's Electronic Command.

According to the AIAA, special care was taken in selecting individuals who were not committed on the UFO problem one way or another. Certainly none appear to have made any public statements concerning UFOs and, all in all, the AIAA UFO Subcommittee has probably brought together a team of specialized individuals who are not prejudiced.

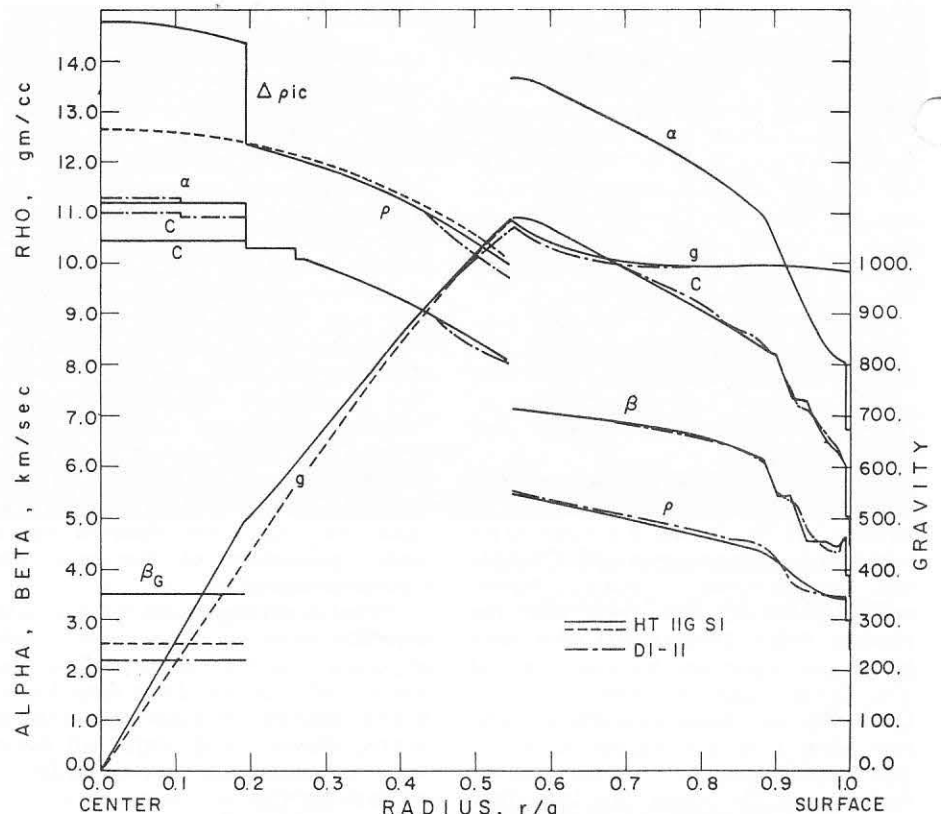
It will be interesting to see what "additional information" on UFOs appears in the AIAA journal in the course of time.

UFOs and the Hollow Earth Theory

by Dr. John S. Derr

Dr. Derr is a Research Scientist, Astrogeophysics Section, Space Sciences Dept., Martin Marietta Corp., Denver, Colorado and is Consultant to APRO in Seismology.

The idea that the Earth is hollow and contains an advanced civilization which is the source of flying saucers has been presented by Raymond Bernard ("The Hollow Earth," Fieldcrest Publishing Co., New York, 1964). This book is well written and contains many intriguing ideas, but there is ample physical and mathematical proof that the Earth is not hollow. For example, pictures taken by satellites in polar orbit have shown no openings. We even have proof for the planet Mars: one of the Mariner spacecraft in 1969 flew over the south pole and showed that the polar "ice cap" was



Distributions of compressional velocity α , shear velocity β , sound velocity C , density ρ , and acceleration of gravity g in the Earth. Multiple lines show the probable range of uncertainty. The sharp discontinuity at fractional radius 0.545 is the core-mantle boundary. In the liquid outer core, β is zero and α equals C . In a hollow Earth, α and C would be about 330 meters per second, whereas β , ρ , and g would be virtually zero.

("dry ice") deposited on a rough surface. The pictures certainly disprove Bernard's contention that the Martian polar caps are entrances to a hollow interior.

Other observational evidence to disprove the hollow Earth theory comes from the field of geodesy. The orbital parameters of every natural and artificial satellite of the Earth are perturbed by its total mass and mass distribution. Detailed tracking of these satellites has proved beyond doubt that there are no significant voids in the interior. One quantity in particular, very valuable in determining the distribution of mass, is the reduced moment of inertia, I/MR^2 , where I is the central moment of inertia, M is the total mass, and R is the radius of the Earth. For a hollow shell, this reduced moment is 0.6667; for a solid ball of uniform mass distribution, like a ball bearing, it is 0.4000. But for the Earth, the reduced moment is 0.3306, less than half what it would have to be for a hollow shell. Thus, the reduced moment actually shows that the Earth's mass is somewhat concentrated toward the center, in complete disagreement with the hollow Earth theory which has the mass concentrated in the outer shell.

The field of seismology also provides ample proof of the lack of voids in the

Earth. By observing the times of arrival of compressional and shear waves over the surface after earthquakes and underground explosions, seismologists can derive the distributions of the velocities of these waves within the interior of the Earth. These distributions are given in the accompanying figure. Extensive observations over the past 80 years have fixed the levels of the major discontinuities: a solid crust of average 30 km thickness, a solid mantle down to a depth of 2894 km, a liquid outer core down to 5150 km, and a solid inner core to the center at 6371 km depth. One crucial test in particular is sufficient to prove the essential features of this model. An earthquake occurring at the antipode of a seismographic station sends a compressional wave diametrically through the Earth. This disturbance, the first to be observed at the station, arrives in 20 minutes and 12 seconds. If the Earth were hollow, this direct wave would not be seen at all; rather, the first arrival would be a compressional wave multiply reflected from the inner and outer surfaces of the shell, and would require almost twice as long a travel time. The fact that the direct arrival is observed with a travel time of some 20 minutes proves beyond doubt that the Earth is not hollow.

Theory —

(Continued from Page Four)

Another branch of seismology deals with the free oscillations of the Earth. A very large earthquake will excite these normal modes of vibration. They were recorded, for example, after the great Alaskan earthquake of 1964 by long period seismographs, strain meters, and gravimeters. To visualize these oscillations, think of the Earth as a big bell: if you hit it hard enough, it rings (oscillates) at a series of frequencies which are determined by the mass, composition, shape, and state of stress of the bell. The frequencies or normal modes of the bell are measured in tens or hundreds of cycles per second, whereas the modes of the Earth, because it is so much larger, are measured as periods of hundreds and thousands of *seconds* (per cycle). The longest period observed for the Earth is 3233 seconds, or about 54 minutes. It can be shown mathematically that a period this long requires the distribution of compressional and shear velocities and density shown in the accompanying figure (see, for example, Derr (1968), "Internal Structure of the Earth Inferred from Free Oscillations," *Journal of Geophysical Research*, Vol. 74, no. 22, pp. 5202-5220). The study of free oscillations, therefore, shows that a hollow Earth is an impossibility.

The proponents of the hollow Earth theory show a distressing lack of understanding of physics and a total disregard of observational evidence and mathematical proof which contradict their imaginative conceptions. As a final example, consider the hypothetical civilization living on the underside of the supposed shell. It is easy to show mathematically that the force of gravity inside a self-gravitating sphere or shell is always directed toward the center. The net force of gravity anywhere inside the Earth is, therefore, determined by the mass contained interior to the radius of one's position. The mass exterior to this position has no effect. Thus, a civilization attempting to live inside a hollow Earth would have to attach itself to the shell. Otherwise, either they would live in weightlessness, or, if one supposes a "central sun" to light and heat this inner world, they would fall into *their* sun! For the same reasons, any person or vehicle attempting to transit the supposed polar openings would not be able to follow the curvature of the opening into the interior, but would rather find himself going down a steeper and steeper hill until he slipped off and fell into the center. In addition, the Arctic Ocean would drain into the center! For these and other reasons, anyone who examines all the evidence carefully must conclude that a hollow Earth is a total impossibility.

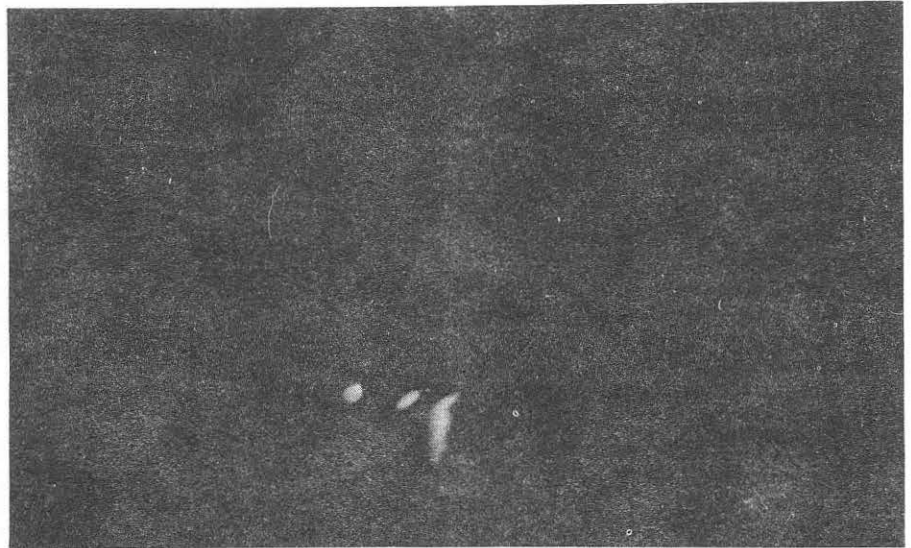


Photo of October 6 UFO at Decatur, Alabama

Object Photographed In Alabama

Acting on a tip resulting from a newspaper article, Field Investigator Harold Green investigated a case which took place on the 6th of October 1970 at 8:15 p.m. and which resulted in what is considered to be a very good photograph of a night-flying UFO (see photo above).

Mrs. Dennis Billings of Decatur, Alabama, went out into her front yard to gather up the children's toys and seconds later, Mr. Billings who was in the house, heard her screaming for him to come out. He went out into the yard where his wife was pointing to the southeast, and saw a lighted object just going out of sight. It appeared to be at low altitude and Mrs. Billings said it came out of the north, headed south, then veered toward the east.

Mr. Billings got his camera out of his car and at that time another object, similar to the first, came down out of the sky, leveled off and slowly flew in the same direction as the other object. Billings adjusted the lens of his camera, walked to the back yard so that he could get an unobstructed view, focussed the camera and took one shot. He ran a block, almost under the object and took another but the second photograph yielded nothing.

Both the Billings' said that a dark mass was easily seen behind the lights on the object, and is often the case, the negative shows much more than the print which is reproduced here.

During the course of his interview with Mr. Billings, Mr. Green learned of a sighting which the Billings' had made on a Friday in September, 1966 at about 7:30 p.m., which resembled very much his

sighting of October 1970.

In this case, Mr. Billings had gone out the back door to take the garbage out, and was startled to hear sounds from the house on the other street. He said he could hear sounds like conversation, children playing, the rattle of dishes and silverware, etc., as if the sounds from the house (which was closed up, no doors or windows being open) were being amplified. Suddenly an object which apparently had been dark and therefore not immediately visible, lit up into an orange ball above the house from which the sounds were emanating. It dropped what looked like white sparks, then it dimmed out and lights came on around its edge. These lights were all colors of the spectrum, running from red, orange, yellow to white, and then the blue and green shades. The lights also blinked on and off in sequence. The object moved away, and while Billings watched it with binoculars, another object came over, hovered above the yard for 2 to 3 minutes, then started to move slowly away. He walked under it to the front yard and estimated that at that time its altitude was approximately 400 feet and it was between 50 and 75 feet in diameter. The underside of the object had a dome-like protrusion which Billings said looked like translucent glass and light seemed to come from it or perhaps was being reflected from the lights on the rim. There appeared also to be moving shadows, but Billings could not be certain that they were from inside the object or a result of the flickering lights or shadows from the ground.

The lights of the object (as well as the one photographed in October 1970) were arranged around the edge of the object, but there were none on the leading edge of it. Billings said that after the object was gone his eyes felt strained and tired

(See Alabama — Page Six)

Alabama —

(Continued from Page Five)

and burned for the rest of that night. He observed that the speed of the blinking lights seemed to be synchronized with the speed of the object; they blinked slowly when the object was traveling slowly, and faster as it speeded up. It moved across the sky toward a nearby airport, stopped and hovered for about 10 minutes, looking much like a star except for the changing colors. It then moved higher, getting considerably smaller, and when a Southern Airways plane went over the object followed it until it was near the Billings home again, then went back to its position in the vicinity of the airport. Billings noted the distinct difference between the object and the aircraft.

The object, by now discernible only as flashing lights, stayed in its position near the airport for another five minutes, moved very fast to the north where it hovered for 10 minutes and then appeared to fall to the ground. Billings continued to watch that area and about 15 minutes later the object came back up into the sky, hovered for a few seconds, then moved off to the west where it "met up" with another identical object; both hovered for a few minutes and then both moved off together.

APRO plans to have the photograph examined by Dr. Frieden, Consultant in Optics, and perhaps it will be possible to bring out more detail.

UFO Phenomena in Puerto Rico

APRO's Representative in Puerto Rico, Sebastian Robiou L., recently sent Headquarters his full reports on several investigations into UFO incidents on that Caribbean island. Below are summaries of two of his reports.

The first incident took place between 11 and 11:15 a.m. (local time) on the 6 of April, 1967, near Tortuguero, while two Cessna 150 aircraft were flying under unlimited visibility conditions. Aircraft A contained a flight instructor, whose name cannot be published, and flight student Alvaro Munoz. The names of the instructor and student aboard aircraft B cannot be published.

Aircraft A and B were flying in formation at 3,000 feet in an east-northeast direction, north of Vega Baja, on the north coast of Puerto Rico. Aircraft A was slightly ahead and 1,000 feet above aircraft B. While student Munoz was practicing "blind flying," his instructor observed an unidentified object behind and below aircraft B. He called the pilot of aircraft B, who then commenced a 180° turn, at which the UFO dropped sharply (estimated about 200 feet above

sea level) and passed under aircraft B without the pilot seeing it.

Aircraft A continued its normal route and the pilot observed the UFO pass him on the north side. He pointed the object out to Munoz, who exclaimed (in Spanish): "My God! That's a flying saucer!" The pilot then told Munoz not to lose sight of the object while he piloted the Cessna. Munoz got a good look at it as it passed on their north side, about 1,500 feet below them, while the pilot was attempting a turn to bring the object closer. The descending turn increased the speed of the Cessna from 90 mph to 140 mph, while the UFO appeared to be moving at least double their speed.

The pilot of Aircraft A leveled the Cessna out and the UFO made a sudden 90° turn without any pre-deceleration and disappeared. The pilot of aircraft B was meanwhile terminating his turn; neither the pilot or the student aboard aircraft B saw the UFO. The total sighting lasted between 15 and 20 seconds. The two witnesses aboard aircraft A described the UFO as "oval, not round" and with a dull-white, metal color. Comparing its approximate size to the Cessna B, the UFO was estimated to be 60 feet long (3 times that of a Cessna 150). It had an apparent size of 8 inches at arm's length. The two witnesses did not observe any other structural details on the object but they described it as "solid" and following "intelligent maneuvers, not erratic." Upon landing at San Juan, Munoz called his wife to tell her about the sighting, which she confirmed to Representative Robiou.

Munoz, who is now a flight instructor with the Isla Grande Flying School and Service Corp., says that the Federal Aviation Administration (FAA) gathered data on the sighting after it happened, but stated that they had not tracked any unidentified object at the time. Representative Robiou, who calls this "one of the most interesting UFO cases in Puerto Rico," notes that the pilot-instructor of Aircraft A does not want publicity; Munoz is more cooperative. Neither took UFOs seriously before their observation.

Mr. Robiou's conclusion is: "If we accept the statements of the witnesses as true, as they seem to be, we cannot find any explanation within our frame of knowledge. The object seen by the witnesses deserves the title: Unidentified Flying Object."

Another case investigated by APRO's Representative in Puerto Rico concerns an incident which occurred between 7:30 and 9:00 p.m. on December 31, 1968 on the PR-2 road, near "Los Quemados," Vega Baja. The witnesses are an 80 year old farmer and rancher and his nephew, a 38 year old dental mechanic and farmer. The witnesses do not wish their names to be made public.

The two witnesses were driving at about 40-45 mph from the town of

Isabela to San Juan. Shortly after passing Vega Baja, while they were on a straight stretch of road, their headlights illuminated a "clear white" object stationary on the right side of the road. The nephew, who was driving, exclaimed: "Look at that!" and then accelerated away from the object. He described it as white and round and a human-like figure was standing before it. For the few seconds that he had a clear view of the entity, he saw what he later described as "a midget" 5 feet tall. Its mouth gave him the impression that (like in elderly persons) it had no teeth. However, what he recalled mostly were the entities eyes, which allegedly shone brightly in the dark, "like a cat." The entity was supposedly about 10 feet from the Ford Cortina as they drove by.

The elderly uncle did not observe the entity standing before the object. However, he claims that as they drove away he turned back and saw that the object "lit-up" like a blue-green light bulb. He also claims that he saw the object begin to rise (it then had a reddish color) and he heard a faint sound, "no stronger than a car." The nephew, who was driving off frightened, did not hear or see anything further.

The nephew dropped his uncle off at his home in San Jose and went to his own home. However, he did not see the New Year in with his mother, as he did every year. Instead he went to bed and tried to sleep, as he was "very nervous." The next day he informed his wife and children of the incident. Today he says: "Nobody believes it." His uncle says: "It was something. What it was, I don't know."

Representative Robiou makes the following observations: both witnesses are natives of Isabela, from where they drove that night, and now live in San Juan. Vega Baja is about 25 miles from San Juan. Between 7:30 and 9:00 p.m., and especially on New Year's Eve, highway No. 2 was very probably void of traffic, as the witnesses claim. The elderly uncle wears glasses and is known to suffer from cataracts. Both witnesses said the object was about the size of a European car, but was definitely not a car; it was round, like "an ashtray turned upside down."

Mr. Robiou, who interviewed the witnesses separately, says they are honest, working people who do not want any publicity; they insist in what they saw, although their versions differ, "They very definitely saw something, what it was we don't know."

Another interesting incident in Puerto Rico took place on August 18, 1968, at 2:30 a.m. at Ramey AFB, and involves Sgt. Thomas Carulli, who signed a statement for APRO. The statement, which was obtained through APRO Field Investigator John R. Artie, an Air Force member now stationed at Beale AFB in California, goes as follows:

(See UFO — Page Seven)

UFO —

(Continued from Page Six)

"At approximately August 18, 1968, at approximately 2:30 a.m., off Borinquen Beach, Ramey AFB, Puerto Rico, fifteen other security policemen and myself observed what was believed to be known as an unidentified flying object.

"Visibility was unlimited. The UFO seemed to be rising from the ocean but when first seen it was appearing to be at a 45 degree angle above the surface and rising. While also rising it seemed to yaw to its sides emitting a very bright, almost florescent light which was similar to that of an unblinking strobe light.

ward from within its structures. The reason why it seemed this way was because there appeared to be struts or bars or (you could say) window panes. These struts were verticle and there were about six of them. They reminded me of the crown on the Statue of Liberty but their greatest width seemed to be in their center.

"When it reached its zenith, which in itself appeared to be no more than 1500 ft. off the ground, it lingered there for a few minutes; all the while it emitted this light which lit up the whole area which before was in complete darkness.

"It was circular or sphere-like, more like if you held only your fingertips and your wrists together not letting the palms of your hands touch. In fact, if you would do this with your hands and turn your hands to your face with the fingers at eye level this is what the UFO most nearly looked like.

"Its size was close to a half-dollar at arm's length. It emitted no sound. Lights around us didn't dim either. While in its zenith the UFO seemed to pulsate and fluxed from side to side or wobbled. Then another orb of light came from it.

"This was a light about the size of a dime held at arm's length. It stayed by the side of the first UFO, then it too fluxed or wobbled and shot straight upwards until it was nearly invisible. Then it just seemed to hang there almost indistinguishable from the other stars. After two or three more minutes passed, the first UFO wobbled, turned on its side and darted upwards and outwards in a north-north-westerly direction until it disappeared.

"This whole spectacular phenomenon took about 12-17 minutes in its entirety."

UFO Photos

APRO recently completed a new collection of UFO photographs for sale to members and subscribers. The prints, 3"x5" and black and white, are sold in sets of 5 photos each for \$2.00 a set (individual prints will cost 25c). Below is

a listing of the photos available from APRO:

- Set 1:
1-5 — Barra de Tijuca, Brazil, 5/6/'52.
- Set 2:
1-5 — Trindade Isl., Brazil, 1/16/'58.
- Set 3:
1-4 — Itapoan, Brazil, 4/24/'59.
5 — Santos, Brazil, 9/'55.
- Set 4:
1-4 — Yungay, Peru, 3/'67.
5 — Madre de Dios, Peru, '52.
- Set 5:
1-4 — Santa Ana, Calif., 8/3/'65.
5 — Las Cruces, N.M., 3/12/'67.
- Set 6:
1-2 — McMinnville, Ore., 5/11/'50.
3 — Gibbon, Minn., 10/21/'65.
4 — White Sands, N.M., 10/16/'57.
5 — Apacheland, Ariz., 3/27/'68.
- Set 7:
1 — Mexico, 8/'65.
2 — Venezuela, '63.
3 — Guarico, Venezuela, 2/13/'66.
4 — Melbourne, Aus. 4/2/'66.
5 — Flippin, Ark., 7/16/'69.

APRO does not guarantee that all and every one of these photos depict a real UFO. APRO simply provides the photos and individuals may form their own opinions; they represent some of the best photographic evidence of alleged UFOs in existence.

When ordering, please include checks payable to APRO and indicate which sets and numbers are required. Print name and address clearly.

Philosopher Looks At UFOs

by Dr. Robert F. Creegan

Dr. Creegan is a Professor of Philosophy at the State University of New York at Albany, and is a Consultant to APRO in Philosophy.

As a logician, I am not at all happy with the term "unidentified flying object" because we could not converse in any organized way concerning something totally unidentified. Then, on the empirical side, it is a fact that we *do* know quite a bit about UFOs. For example, in many instances specific motions have been observed and we are currently comparing such motions with those of various types of better known objects. I refer to the so-called "falling leaf" motion, the "hover-and-dart" motion, the "yo-yo" motion and others.

The objects of our interest are not *totally* known. We do not understand their inner dynamics, though a number of speculations have been offered. And we do not know their origin or purpose. In a word, we may use the term "UFO" if we like, on the understanding that it does not imply complete lack of organized data, nor lack of an initial body of theory.

The possibility that the forces responsible for the UFO could simulate conventional aircraft presents a nightmare to the logician. In the UFO literature there are numerous reports of strikingly unconventional aircraft. Other reports are of more conventional appearing aircraft but whose location and/or performance is most puzzling. Simulation of other artifacts seems equally possible. Even simulation of organisms. There are data suggesting all these possibilities.

In the opinion of some, there is evidence that official circles discourage the investigation of these matters. That is an additional reason for carrying on with research, at least in my opinion. Any collusion between official science and the military-industrial complex in this matter would have ominous overtones. The integrity of a segment of official science has already been questioned; some of the personnel connected with the University of Colorado UFO Project, for example, had most peculiar credentials.

In contrast to the opinion offered here, some scientists recommended surrendering the whole problem to the military mind. Of course, the armed forces of the United States and Canada do take note of unconventional aircraft of all types, specially those appearing in polar regions, or in other remote or little populated areas and at least initially unidentified. However, the wider problems have been ignored by those who reduce the field to terms of defense. For example, the most *remote* indication of possible sentience from beyond the biosphere: merits serious, sustained attention from the philosophical viewpoint and from that of social science. What is required is a pooling of resources for a far more sophisticated approach to this set of vital problems.

Let me conclude with the observation that the investigation of the UFO must continue and open publication of cases and theories must continue. These things must be for the sake of scientific integrity, for the sake of civil liberties and perhaps even in the interest of our common security.

Electrical Engineering Consultants

APRO has appointed two new Consultants, Dr. Kenneth Hessel and Dr. Lorin P. McRae, in the field of Electrical Engineering.

Dr. Hessel obtained his B.S. in 1965, his M.S. in 1966 and his Ph.D. in 1969, all in Electrical Engineering at the University of Texas. With a strong background in the gravitational wave theory and tensor fields, Dr. Hessel is highly interested in possible UFO propulsion systems

(See Consultants — Page Eight)

Consultants —

(Continued from Page Seven)

and their relationship to the electromagnetic field theory and the unified field theory. Dr. Hessel is currently a Staff Member of the Sandia Laboratories at Albuquerque, New Mexico.

Dr. McRae obtained his B.S. in Electrical Engineering at The University of Arizona in 1961, his M.S. in Electrical Engineering at New York University in 1963 and his Ph.D. in the same field at The University of Arizona in 1968. He was formerly an employee of Bell Telephone Laboratories in New Jersey and was an Assistant Professor of Electrical Engineering at The University of Wyoming, Laramie, from 1968 to 1970. Dr. McRae is currently a Consultant in Biomedical Engineering at the Tucson Medical Center, conducting research in pre-stroke detection.

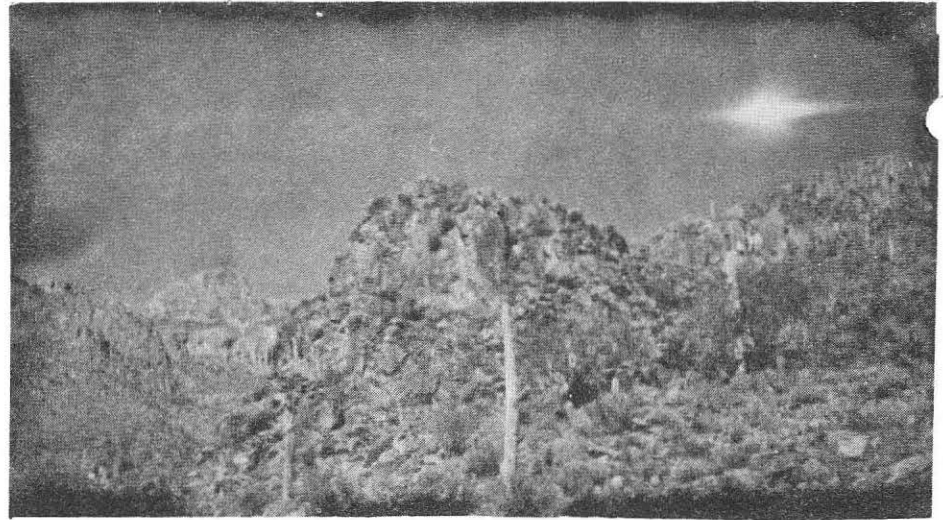
Book Review

UFOs and Diamagnetism

By Eugene H. Burt, Exposition Press Inc., New York; 134 pages, Illustrated

The author has a new but unproven theory that explains certain well known physical observations. The theory also explains the well known characteristics of UFO observations, including the rapid accelerations and intense light emissions. Basically the theory involves the concept of inverted magnetic fields generated by positive charges. That is, "the magnetic fields developed by opposite electrical charges are visualized to be inverted, or turned inside out, with respect to each other." An inverse cube-law force for fields due to positive charges is predicted. Present theory is that there is no difference between the magnetic field generated by a positive charge moving in one direction and the field generated by a negative charge moving in the other direction.

The author's theory explains diamagnetism (the property of certain materials to decrease magnetec flux density, i.e. negative relative susceptance), the elongated Earth's magnetic field, the tails of comets, the failure of electrons to be captured by nuclei, and some other scientific observations in terms of the inverted magnetic field. Mr. Burt feels the typical lens-shaped UFO could be two parabolic disks or covers separated by an insulated tube within which a strong positive current could be developed. The inverted field developed by the positive current would repel electrons. The rapid accelerations reported of UFOs may then be explained by the inverted magnetic



field repelling electrons with a force directly proportional to the number of electrons, which is proportional to the mass of the repelled object. Thus all objects would be repelled with an equal acceleration. The silence of the UFOs would result from the inverted field of the UFO repelling the electron clouds surrounding the air molecules in the atmosphere. The heat and light radiated by UFOs could be the result of deionization around the craft after ionization by the diamagnetic field. All these effects and others are indicated by the author to be somewhat speculative, but he feels they may indeed be correct.

Any of a number of physical considerations, such as what happens to conservation of linear momentum for the UFO, are not discussed. Although the theory is not defined as precisely as it might have been the author demonstrates an ample knowledge of electric and magnetic field theory. The book is fairly technical but should be understandable by UFO enthusiasts and members of the scientific community.

The author criticizes scientists for rejection of *all* UFO observations and their refusal to accept as valid any observations not immediately scientifically explainable. This is an old indictment but the author's points are well taken nevertheless.

Validity of the theory of inverted magnetic fields presented by Mr. Burt is debatable. Major criticisms of the theory are discussed and answered by the author. Skeptics feel that a difference between the magnetic fields developed by positive and negative charges would be very evident in the results of quantum theory and scattering experiments. Whether one agrees with the skeptics of Mr. Burt, the theory is precise enough that other experiments to test the theory could be performed directly.

Dr. Kenneth Hessel,
Sandia Laboratories,
Albuquerque, New Mexico.

UFO Photographed Over Superstition Mountains

The exact date of this case is not known, but it took place in March of 1968. At that time, Mrs. Marie Arnold, one of her wranglers (a cowboy) and two officials of the Pinal County Health Department were north of Apacheland, Arizona (which is located only a few miles south of Phoenix) taking photographs of rock outcroppings in the area.

The photographer was using a Polaroid Land 210 Camera with color film, and concentrating on rock formations in the lower right hand corner of the photo (see above). He had just taken a photo, found the image above on it, turned to Mrs. Arnold and jokingly said: "Ever see a flying saucer?"

He then looked up at the mountains to see what was in the sky and saw an object fly by again. He had used all his film and was not able to take another photo. The object was in sight for 5 seconds between the peaks of the left saddle. After it disappeared he heard a sound like "Whoomp," which lasted about one second.

The visual object did not have the brilliance of the object in the photograph and looked like a stubby cigar with no wings or tail.

The camera was ultimately checked for internal reflections but it was found to be normal. This photograph is one of several which Dr. Frieden is examining at the present time and any findings will be published in a future issue.

New Zip Code

Please note
APRO's new
Zip Code:
85712

Press Reports

The following are a representative section of press reports which have reached this office within the last eight weeks. We would like to urge members and Field Investigators to forward clippings immediately after they have been found so that investigations can be undertaken within the shortest period of time.

On November 23rd, United Press International reported that England's Ministry of Defense is investigating a report that a UFO resembling a "fried egg" (yellow center and white around the outside) had flown over east London on the prior weekend.

The November 26 issue of the Algonquin College Paper at Ottawa, Ontario, Canada, featured a photo of what appeared to be two saucer-shaped objects in the sky. The date of the incident was not given but the paper stated that two students at the college had taken the picture just a few days before. Any member in that area is urged to follow this one up; at first glance the photo appears to be a good one.

The *Chicago Sun Times* for November 5, featured an article concerning the sighting of a UFO by Ron Swiderski at 11 p.m. on the previous Wednesday night. According to Swiderski, he had been adjusting his television antenna on his roof when he spotted the object in the southeast. He described it as looking like a bright star with many tiny stars around it. "The closest thing" (for comparison purposes) he said, "is a barge working the river at night with all its floodlights." As far as we have been able to discern, there were no other reports of a UFO in that area that night.

Quite a bit of newspaper space has been given to the report by Mohammed Ali (Cassius Clay), the controversial heavyweight and ex-world champion, who claims he saw a UFO at about 5 a.m. on the morning of December 1, 1970 while doing road work in Central Park, New York City. According to Clay, he and a United Press Sports writer who was with him, saw a brilliant "larger-than-star-size" light due east of Manhattan, and later Clay, the reporter and trainers watched a point of light streaking due north until it was obscured by trees.

On the same morning, a patrolman reported seeing a UFO hovering over Queens County, New York, but Police Headquarters told the press that no follow-up was planned.

The usual "star" explanations were tagged to this incident, but APRO Field Investigator Dick Ruhl is hard at work and his finalized report may indicate that something more exotic than an ordinary star was responsible for the furor. It is estimated that besides Clay, the reporter

and his trainers, policemen numbering in the hundreds, observed something unusual that night.

* * * * *

BULLETIN RATES

APRO Membership including Bulletin:

U.S., Canada & Mexico . \$5.00 yr.

All other countries . . . \$6.00 yr.

Subscription to Bulletin only:

U.S., Canada & Mexico . \$5.00 yr.

All other countries . . . \$6.00 yr.

More On Magnetic Models of Matter

By Dr. James A. Harder

This is another article by Dr. Harder, Professor of Civil Engineering at the University of California, Berkeley, and Consultant to APRO in Civil Engineering.

It was indeed interesting to find adjacent to my last article (in the Sept.-Oct. *Bulletin*) a comment by Dr. Robert W. Johnson on the Apache Junction Physical Evidence Case; please refer to it in reading the rest of this article. The fundamental magnetic unit of charge, as postulated by Professor Julian Schwinger of Harvard University and described in the Sept.-Oct. *Bulletin*, is enormously larger than the otherwise comparable unit of electrical charge (that of the electron); from quantum mechanical principles it should be 822 times as great, and the force between two oppositely charged elementary particles, if they exist, should be the square of this number times that of the force between the electron and a proton. Thus the forces that hold three "quarks" or "dions" together to form protons, neutrons, and electrons are on the order of fifty times the nuclear binding forces. This is an adequate explanation of why isolated magnetically charged particles have not yet been found, in spite of searches at several large particle accelerator laboratories.

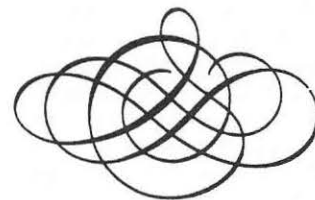
Were it possible to produce particles with a magnetic charge, which would be comparable to electrons, and somehow arrange for magnetic conductors for them (as we now arrange for conductors for electrons) one can imagine that enormously more powerful electrical machinery could be produced — sufficient to make some of the power handling capabilities reported in connection with

UFOs seem feasible.

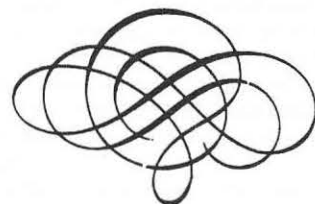
What kind of conductors would work? Are there any clues in the discovery that the Apache Junction artifact had an iron-manganese alloy wire core? Certainly a ferro-magnetic material would be a good conductor of the magnetic field, but we must remember that materials with a high dielectric constant (such as water and barium titanate) are not necessarily good conductors of electrons; thus materials with a high magnetic susceptibility, like iron, may not be good conductors of "magnetrons".

Further speculation, centered on the Apache Junction artifact: would a residue of magnetically charged particles interact with ordinary matter to produce the heat that melted the plastic box? Is calcite an insulator for such particles? Well, my speculation has gone far enough. *Bulletin* readers will no doubt supply more!

Next issue: What kinds of instrumentation could give us the most information about UFOs?



Beginning with this issue the A.P.R.O. *Bulletin* will contain nine pages of text instead of the previous eight, thus eliminating the need for a bulletin cover.



CORRECTION:

We would like to point out that an error was made in an article concerning APRO headquarters staff in our last issue. Mrs. Madeleine Cooper, our Membership Secretary is *not* a paid employee, but is one of the many volunteer workers to whom APRO is indebted for long hours of work keeping the correspondence flowing.