

# The British U.F.O. Research Association

## RESEARCH BULLETIN

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### From the Director

The UFO Phenomenon has been called the greatest mystery of our time and unless one considers the fundamental question of the origin of life itself, then this statement may indeed be true. If as our working hypothesis suggests, the Phenomenon represents the presence of advanced technologies in our skies, we could even consider UFO observations as fortuitous glimpses at a more scientifically developed state in the evolutionary pattern of life.

Apart from what we might term as the genuine mystery attached to the subject, there are the great majority of instances where the observer honestly mistakes natural phenomena and man-made devices for something rather stranger, which he assumes may be representative of an entirely new category. Evaluation of this type of UFO report by persons qualified and experienced in these matters can quickly dispel this kind of mystery and determine a normal explanation. Observation of the Skylab spacecraft and associated debris will undoubtedly have brought in the usual crop of UFO reports, especially as we were sadly misinformed by some who profess knowledge of satellite behaviour that this particular object could only be seen from the south coast of England under exceptionally favourable conditions. Skylab was in fact observed and photographed from Dunfermline! At Manchester it can reach an elevation of 45°.

Harder to dispel are the mysteries which have been created and have grown up with the phenomenon since public interest was first aroused shortly after the last war. It would take far too long to detail the many recognised natural phenomena which the enthusiasts have from time to time mistakenly associated with UFOs. Once the association has been tentatively suggested it seems to become an accepted part of UFO lore and adds even more to the confusion.

I believe it is high time that we in BUFORA attempted to adopt a different approach to the subject. We continually read about "the signal and the noise"; why not practice this idea and try to "isolate" from the confusion those events of genuine high strangeness. Personally I frown upon those who still do their damndest to create the most absurd and tenuous "connections" between manifestations which are to some degree or other already recognised and understood and that which is not - the UFO Phenomenon. Let us not continue to chase blindly after Will o' the Wisps for example, or meteoric fireballs or ball lightning, earthquake lights and other luminous natural phenomena, which tend to be gathered beneath the UFO umbrella. Isn't it about time we graduated and got down to brass tacks.

Anthony R. Pace.

### A Disclaimer

I should like to take the opportunity here of pointing out that since my appointment as Projects Officer some members may have wrongly assumed that I am wholly committed to a so-called "nuts and bolts" approach to UFOs. Modern science is far from being a "nuts and bolts" study, as anyone will know, if he has read of black holes, electron clouds, rotation remanent magnetisation, the search for tachyons, and the arguments which are still continuing about Einstein's theories of relativity ( see, for example, The Special Theory of Relativity, A Critical Analysis by L. Essen, Oxford Science Research Papers 5, publ. 1971, Clarendon Press Oxford. ) I believe that scientists will have to help the ufologists to explain the "miraculous" capabilities of UFOs, perhaps including apparent changes in size and shape, and instantaneous disappearance. But the correct use of scientific method will enable us to predict some features of UFO phenomena, say, for instance, that a UFO of a certain shape and size will be occupied by humanoids of a certain type. Until we can begin to predict, we must continue to look for patterns, even if, as I feel, our visitors are not making it easy for us.

Charles F. Lockwood. Projects Officer.

Publications Sub-Committee



A publications Sub-Committee has been formed to look into the whole question of the future BUFORA publications with the aim of determining ways and means of improving both their contents and quality. At the Committee Meeting in September 1973 the various proposals received and discussed by the sub-committee members are to be presented for approval. Certain recommendations will be made and if agreed, will be implemented as speedily as possible.

Amongst the proposals already made are, a larger format for the Journal; the publication of fully investigated and evaluated UFO reports; the inclusion of more illustrations particularly in the Journal and the production of an investigators' handbook.

Already we have published the UFO Guide and have seen some improvements in our Journal. The last three editions for example have contained an average of 30 pages and the new cover design is certainly much more attractive. However a lot more changes could be made for the better and it is up to you the members to let the Sub-Committee know your feelings on BUFORA publications. Please send your ideas and proposals to the Editor, Norman Oliver, 95 Taunton Road, London SE12 8PA.

Is the Earth being surveyed by UFOs?

The suggestion has often been made by people involved in the study of UFOs that the Earth is being surveyed by extra-terrestrial visitors, and many sightings have apparently included reports of some form of sampling activity. I am puzzled and a little doubtful about this suggestion, although Man is himself continuously monitoring his environment, both on Earth and out in space. I am puzzled, because the methods used, according to some witnesses, so resemble those used by astronauts on the Apollo missions.

However, even if we are being deliberately misled, as some Ufologists argue, whenever there seems to be a residual effect, we must study it, in the hope that there is within the data a real clue to the nature of UFOs. It is for this reason that I suggest that we examine a book on mineralogy, Introduction to Mineralogy by Carl W. Correns, publ. Allen and Unwin 1969, p. 144., in the section on Crystal Optics of Visible Light.

" Fluorescence.

This is important in mineral identification and promises to be of even greater importance in the future. By fluorescence a substance radiated with short wave length light re-emits light of longer wave length. Ultraviolet light is used to demonstrate this property. This is commonly produced by means of a mercury-quartz glass lamp, and filtered through a screen transparent only to ultraviolet light. It is sufficient to use an ordinary arc lamp with such a filter. Quartz optics are necessary for transmission. Fluorescence of minerals is usually caused by impurities, which usually occur in only trace amounts.

Common examples are the inclusion of small amounts of rare earths in fluorite, or of manganese in calcite.

Their identification can have important geochemical significance, and is often used in identifying locality of origin. Fluorescent substances can be detected in very low concentrations. For example, as little as 0.00026 cm.<sup>3</sup> of petroleum can be detected in 1 cm.<sup>3</sup> of sand. "

It seems to me that there may be a possible link between the use of irradiation of the ground by UFOs employing beams of light and the spectroscopic analysis of chemical structures within our environment. It would be consistent with the high speed and brief appearance of UFOs for them to be using rapid survey techniques. As indicated in the short extract printed above ultraviolet and infrared spectroscopy can be a rapid method of analysis, especially if carried out in situ.

If any members have information about sightings, which might possibly have involved this technique, I should be pleased to hear from them. I should also like to hear from members who have any practical experience of spectroscopy, as I feel that BUFORA should be moving towards experiments with diffraction gratings in nationwide skywatches, within the next few years, even though skywatches have been condemned by some as unproductive.

I am at present studying the landing at Delphos, Kansas, Nov. 2nd. 1971, reported in F.S.R. Case Histories Supplement 9, Feb. 1972, in the hope that this sighting might be associated with such procedures. I note that in that sighting there may be evidence of ground sample preparation, using at least one organic solvent, such as ether, isopentane and ethanol. This requires further discussion with experts in spectroscopy.

It should be noted that not all of the re-emitted radiation may be visible. However, I think that it is important not to assume that it is radioactivity which is the most significant feature of an area recently visited by a UFO. There is the possibility that it may leave behind an area which is fluorescing or emitting a band of infrared radiation, owing to a rise in the temperature of that region. However, investigators even in America seem to fly to the Geiger-Muller counter and are usually disappointed, when the readings are normal. It is true fluorescence can be caused by alpha, beta and gamma rays, but we must not overlook the production of this effect by ultraviolet irradiation, as discussed above, or by other excitation methods, such as electron bombardment.

Charles F. Lockwood.

### Meteorites

The oldest meteorite on Earth, possibly part of the material from which the solar system itself was born, has been identified after four years of painstaking research. Dr. G.J. Wasserburg, professor of geophysics at the California Institute of Technology, says parts of the Allende meteorite are 4,600 million years old. One of the most spectacular meteorite falls in recent years occurred near the tiny Mexican village of Allende, in February, 1969, and as soon as this was confirmed, Dr. Wasserburg went there to get samples. The meteorite was estimated to weigh originally four tons but broke into innumerable pebbles, stones and larger rocks as it fell through our atmosphere. Back at the Caltec, Dr. Wasserburg analysed the tiny mineral globules enclosed in some of the larger rock samples, and these distinct chunks, like raisins in a pudding, are the oldest mineral specimen ever found on Earth. " These mineral globules are probably 5-10 million years older than Earth and Moon, which we now think are about 4,600 million years old, " Dr. Wasserburg said. He carried out his analysis by measuring the relative abundance of two isotopes of the chemical element strontium by using a mass spectrometer which can analyse the composition of extremely small quantities of matter with greatest accuracy. The origin of meteorites is still a complete mystery. Some astronomers think they come from comets, others think they have their origin in the asteroid belt, lying beyond the planet Mars.

Daily Telegraph - 9.7.73.

BUFORA Projects



February 9, 1962. 3 a.m. Dunstable. Ronald Wildman, of Luton, was driving his car when suddenly his headlights lit up a fantastic object, 40ft. across and 25ft. above the road. It was shaped like a saucer. [Pictures reproduced by permission of the Daily Sketch].

As previously announced in the Journal and in more detail in the January 1973 Research Bulletin we are now beginning the first phase of centrally coordinated research. Very valuable work has been, and is being, done by individuals and small groups in this country and throughout the world. However BUFORA we feel is in the best position to establish contacts with professional and commercial bodies, which can give to UFO research the status which is needed for genuine progress, and which is being accorded to some overseas UFO associations.

The two projects which are now well underway are, the development of a standard investigation field kit and a longer term idea concerned with the study and analysis of UFO sightings which appear to have involved some unexplained interference with the normal running of motor vehicles. Approximately 40 members, who have expressed their willingness to help have been circulated with questionnaires concerning general research assistance and also more details information "forms" dealing with these two specific projects. It is hoped that the standard field kit

will be completed before the end of the year and that this may be published as an integral part of a BUFORA investigators' handbook - the second in our new series of publications.

I do therefore earnestly ask you to consider ways in which you can assist BUFORA in one of the projects currently being pursued or in initiating a project of your own suggestion. Would you please write to the Research H.Q.

C.F.L. and A.R.P.

Offer of help from new University UFO Research Society

THE EDINBURGH UNIVERSITY U.F.O. RESEARCH SOCIETY

c/o The University Union,  
Teviot Row,  
Edinburgh 8.

7th June, 1973

Dear Mr. Lockwood,

Thank you for your letter of the 28th May, and the various forms. I cannot give you as full a reply as I would like as we are all involved in examinations at the moment and the Society will not really be getting under way until next term. However I hope this will do for the moment as a start.

Regarding the field investigation kit, we discussed this at our last meeting and I am enclosing our comments, which I hope may be of some use. We felt that some type of radiation-monitoring device was essential, as this is a very important

parameter, for obvious health and scientific reasons. It would only be necessary in cases of close encounter or residual traces, but in these cases checks of the environment and samples, and blood tests of the witnesses, if they were willing, would be capable of yielding useful objective evidence if done carefully.

We can probably arrange for analysis of samples, particularly with regard to radioactivity, as our Biochemistry Department is very proud of its radiation detection equipment and has indicated a willingness to help. Also we have access to computer facilities. The Computer Centre has an IBM system 370, and smaller machines are also available. We should be able to arrange to run programs in Fortran, Algol and Imp, with card input and possibly tape ( Teletype ).

Several of our members are interested in vehicle interference effects, so we should be obliged if you could let us have further details. Mr. Duncan Hogg told me of the only two cases he has heard of in Scotland and I am enclosing what little I know about them. We are trying to retrace the witnesses in the first case but the airline pilot is now in South Africa and I think is lost to us. Mr. Hogg may be able to give you a little more information about these.

There is some interest in our Biochemistry Department which is the only one we have contacted so far. It resides in the person of one of the senior lecturers in particular, who has for a long time been aware of UFOs as a problem. Although he is rather busy with many interests he would probably be willing to help with advice and comments if approached.

We should certainly like to seek support and advice from among the permanent staff and intend to try to canvass help from those with some interest in the subject already and try to present the problem in an attractive way to those who perhaps have not thought about it or who may have misconceptions. However I think the best way at the moment is by personal contact and it will be easiest if we can approach people with a particular problem in their field of interest rather than trying to get general and potential support. So if you have any specific problems, reports, papers etc., that require expert advice please could you let us have copies and they can provide a basis for contact with the appropriate experts.

Finally, we should be glad if you could let us have the Research Bulletin as we do not have a copy.

Good luck with your projects.

Miss P. Hannaford,  
President

#### Possible Meteorite?

#### THING FROM SPACE?

Barton-under-Needwood police are trying to solve a mystery. They would like to find out what smashed a hole in the roof of Tom Mellor's hay barn over the weekend. They were called to his farm at Dark Lane, Alrewas, after he had heard a loud crack outside. Other local people also said there was a bright flash in the sky. A hole about a foot square was made in the roof of the barn. Samples of the asbestos cladding have been sent to forensic science laboratories in Birmingham to see if the damage was caused by a meteorite.

Lichfield Mercury - 6.7.73.

### Radiation Monitoring

It has been suggested, and there is some evidence to confirm the suggestion, that UFOs may be connected with the emission of ionising radiations, or possibly the production of radioactive isotopes. Obviously it is very important to find out whether this is the case. As well as the potential dangers from radiation, its importance also lies in the great amount of scientific information that can be gained from its study. Evidence of radiation is objective and therefore convincing; its presence would open up many fascinating and profitable lines of study. Even its absence might be significant. The only place to start is with the investigation, and I feel that tests should always be done in cases of possible environmental effects from a UFO. Individual investigators will always be hampered to some extent by lack of equipment or training but it should be possible to improve the situation. There are basically two parts to the problem. Physical effects ( residual radiation ) and physiological ones ( radiation exposure ).

#### Physical

If at all possible the investigator should take some type of radiation monitor to likely cases. The best would be a portable Geiger-Muller counter but unfortunately these are expensive. A decent one with a scale could cost £50 - £100. Cheaper versions with no scale that just emit a clicking noise are better than nothing but give little idea of the amount of radiation. Possibly an investigator may be able to borrow a Geiger counter from a University, hospital, forensic science department, laboratory or even school. It is very important that the exact spot of the measurement and, for instance, the distance above the ground, should be noted, and also the time of the reading. Readings should be taken in precisely the same places at a known time later. This will enable the half-lives of radioactive isotopes to be measured.

Any investigator could carry a dosimeter. These are very cheap but of limited use. Provided they are charged up before going to the site, they will provide a reading of the accumulated dose of radiation. If any readings were obtained it would definitely be a case for calling in the experts!

In any event, all field equipment has its limitations and even the best Geiger counter will only pick up 'hard' or high energy radiations. There could be any amount of soft radiation around, hence the need to take samples and label them with the site of origin. This should be done in any incident with a really close encounter or in which physical traces are left. They should be sent to a suitable laboratory for analysis.

#### Physiological

The effect of radiation depends very much on the dosage and also varies markedly with different people. Symptoms may be similar to those produced by many other causes but one sign that is important and which develops fairly rapidly ( within a few days ) is a fall in the number of white cells circulating in the bloodstream. This can give an idea of the dose received and is important diagnostically. So if anyone has been very close to an unidentified object that might have been emitting radiation they should be strongly advised for safety's sake to go to their doctor or the hospital and have a blood test done as soon as possible. Then they will have another one done a few days later for comparison.

Pat Hannaford  
The Edinburgh University U.F.O. Research Society

## Earthquake Lights

There have been a number of cases recorded in UFO literature where observers have reported luminous phenomena associated with earthquake events. Naturally people have associated these earthquake lights with the characteristic glowing effects of UFOs. There are those researchers, who feel that UFOs are in some way "dependant" upon fault lines in the Earth's crust and have maintained that these luminous bodies appear shortly before an impending earthquake. Others go so far as to suggest that UFOs themselves contribute towards or even cause earthquakes! It seems now that the former of these ideas may well be true, except that the lights reported appear to some poorly understood natural phenomenon whose origins lie in the seismic forces which produce earthquakes. The following article from New Scientist Vol. 58, No. 845 dated 10th May, 1973 discusses the possible mechanism involved.

### How do earthquakes generate lightning?

In Japan, where earthquakes are of course common experiences, there is a traditional way of predicting these crustal crises-by looking at the sky for signs of particularly clear lightning. Lives, it is claimed, are saved by this expedient. More objectively, however, there is substantial evidence linking the occurrence of sheet, stroke and ball lightning with earthquakes. Two and a half years ago David Finkelstein of Yeshiva University, New York and James Powell of Brookhaven National Laboratory suggested that the only likely mechanism by which seismic energy could be translated into atmospheric electrical discharges was via the piezoelectric effect. Alternative hypotheses-such as that an electrical potential is created by the capillary flow of under-ground water; or the electrostatic charging of dust-were inadequate ( Nature, Vol. 228, P. 759 ).

To make their mechanism work Finkelstein and Powell argued that the terrain involved in the "seismo-electric" effect must be rich in the mineral quartz, the only significantly piezoelectric mineral in the Earth's crust. Also the individual quartz crystals must possess long-range alignment ( over about 2 km ).

Given these conditions, they showed, typical earthquake stress changes in the rocks could produce an average electric field of between 500 and 5,000 V/cm, or between 50 million and 500 million volts over a seismic half wavelength. One of the best documented instances of earthquake lightning occurred near Mt Hakone in Japan late in 1930-and the rocks were lavas especially rich in quartz which had been subjected to powerful shearing forces likely to lead to substantial crystal alignments.

The theory, which the two workers believed might serve for earthquake prediction on a scientific basis, depended, however, on the absence of short-circuiting channels such as thick conductive soil layers, or current routes through the rocks themselves. Finkelstein and Powell, working with R.D. Hill of the General Research Corporation, Santa Barbara, California, have now measured the resistivities of rocks in the Los Angeles area where "unusual light" was seen at the time of the San Fernando earthquake on 9th February, 1971 ( Journal of Geophysical Research, Vol. 78, p. 992 ). Here, unfortunately, the quartz-bearing rocks turn out to have resistivities too low ( 300 to 3,000 ohm/m ) to allow sufficiently large electric fields to build up to provide lightning discharges ( resistivities of  $10^9$  ohm/m are necessary ).

The three workers are reluctant to abandon the piezoelectric answer to the problem, however, especially as further authentic sightings of earthquake lightning have come to their attention. ( Japanese workers reported earthquake lightning during a series of seismic events in Matsushiro between 1965 and 1967; the Tashkent earthquake of 1966 was apparently accompanied by lightning; and a Buenos Aires newspaper carried a story in May 1936 of vigorous lightning associated with an earthquake in San Luis province. ) Certain granites under high pressure may, they say, offer the right conditions; or, alternatively, high-pressure deep-seated rocks would have adequate resistivity-the problem then remains to explain how piezoelectric fields 10 km deep reach the Earth's surface.

UFO Reports from here and there

1943

" In May 1943, I was stationed at R.A.F. Ludham in Norfolk, I missed my last train to camp, so I set off to walk 16 miles back. I was about 4 miles from camp in the country with no houses for maybe 2 miles, the lane I walked up was a slight bending right, when suddenly I saw a person standing at the edge of a field with something strapped on the chest which gave a glow to the face, greenish in colour. Believe me my hair stood on end I was terrified. I walked passed as best I could and half noticed about 20-30 yards away in the field was some kind of object, which seemed alight, in colours. I thought I saw two other persons probing about the ground near the object. I never spoke to the person I walked passed. I was shaking with fright. I never reported the affair to anyone at camp, I was about 2½ hours late. I can describe it more in detail when I told my boys 20 years later."

J. Warren, Batley, Yorks.

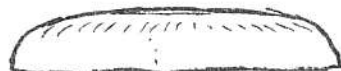
This report is being followed up by BUFORA's Yorkshire Branch.

1967

" The incident took place so long ago now that I cannot remember the exact time of year, or even the exact year! It was about June or July 1967 I think. So far as I know, there were two witnesses, myself and a friend. His name is Russell. We were standing in some fields outside his house, which is No. 42, Station Road, Mow Cop. This is not far from Newchapel, as you know. Station Road overlooks the whole of the Cheshire plain and on a clear day it is possible to see for many miles. We were in this field playing with Russell's dog, when we heard a noise and saw the object. The time was about 3.30. There was only one visible object. When we first saw the object it was rising above some trees to our right, which at my calculations is N.E. It was at an angle of about 10°-15° above the land level and it rose to a great height, almost into the clouds. It was not a balloon. It was not travelling with the wind which was coming in from the Cheshire Plain. The object came down towards us and in front of us, and thus travelled into the wind, it then shot away over the Cheshire Plain away to the right of Jodrell Bank, it looked to be about an inch above the horizon in the distance. I am sure my friend will agree with this report, at least with most of the details, if not all. The object was yellow, looked like a cigar but it was spinning so I think it was disc-shaped. It did not come very close but it was perhaps 30-40' across and 5-10' high. It gave off a slight humming noise. It at one time was below the horizon. It looked slightly metallic. I have included some sketches to show its shape."



TWO VIEWS



SECTIONAL VIEW

J.C. Bradbury, Sneyd Green, Staffs.

1973 - UFO follows Mozambique airliner

A Boeing 737 jet of Mozambique's Deta airline was followed by an unidentified flying object for 20 minutes on a night flight from Beira to Lourenco Marques. The plane was flying at a height of 8,400 m and a speed of 850 km/h when the aircraft's veteran commander, Captain Gilberto Costa, and first pilot Edgar Nasi Pereira saw the object. They immediately called two air hostesses to the cockpit to corroborate the sighting. In a report submitted to the airline's administration and the Mozambique military authorities, the crew said the object followed the airliner for about 20 minutes. It switched from the right to the left side of the aircraft a few times with red lights flashing before disappearing at enormous speed.