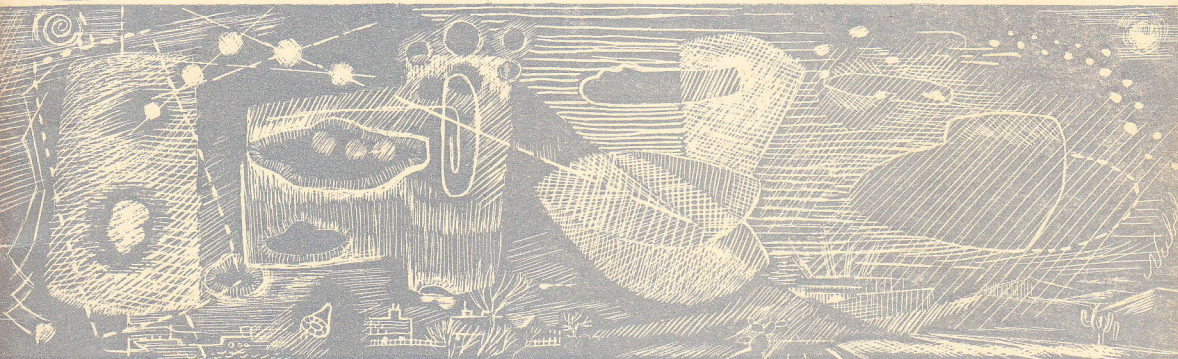


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BUFORA



JOURNAL

AND BULLETIN

Published by the

BRITISH U.F.O. RESEARCH ASSOCIATION

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The BRITISH UNIDENTIFIED FLYING OBJECT RESEARCH ASSOCIATION

Founded 1962

AIMS:

1. To encourage and promote unbiased scientific investigation and research into Unidentified Flying Object phenomena.
2. To collect and disseminate evidence and data relating to Unidentified Flying Objects.
3. To co-ordinate UFO Research on a nation-wide scale and co-operate with persons and organisations engaged upon similar research in all parts of the world.

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THE BUFORA JOURNAL AND BULLETIN

Volume 1 Number 9

Summer 1966

Editor : J. Cleary-Baker, Ph.D. *Editorial Address* : 3 Devenish Road, Weeke,
Winchester, Hants.

EDITORIAL

It is generally accepted among UFO-researchers that UFOs did not arrive on the terrestrial scene suddenly in 1947, when Kenneth Arnold reported his celebrated sighting, nor even four years before that with the advent of the "Foo-Fighters" in World War Two. UFO reports are scattered sparsely throughout the period of written history. Even in the legends of primitive peoples one encounters references to aerial vehicles which resemble the unknown flying objects haunting our skies today.

This fact has been seized upon by a motley array of would-be UFO historians of whom one can say little more than that their enthusiasm has generally outrun their knowledge. Old chronicles have been ransacked and every phenomenon capable of being twisted to resemble a UFO visitation has been uncritically interpreted as such.

When, however, all this literary garbage is sifted, a few accounts of real value are found to remain after the detritus of pseudo-scholarship has been rejected. Enough of them, in fact, to suggest that the UFO has indeed been with humanity down through the centuries, although not in such numbers as at present.

It is easy to unmask many of the false UFOs which have fooled our inexperienced seekers. Mock suns and moons, aurorae, comets, fireballs and the like have not changed their aspect with time. In some respects, past centuries are a happy hunting-ground for a sadly-harassed UFO evaluation officer. No airplanes, missiles, searchlights or headlamps reflected on clouds and not even the stray balloon to worry about until well into the 19th.-Century! Even better, no disgruntled witnesses to cry out against him if a sighting dissolves, upon investigation, into a commonplace phenomenon!

The late M. K. Jessup, whose tragic death in rather mysterious circumstances some years ago was a blow to UFO-research, saw in the UFO-denizens the descendants of survivors of some astronomical catastrophe which wiped out a flourishing civilization, long prior to the rise of Ancient Egypt and Babylon. Archaeology rejects any such supposition with a contemptuous sniff. The pundits will have it that the cultures which arose in the valleys of the Nile, Euphrates and Indus some four to five thousand years B.C., were the first ever to bloom upon this planet.

In this matter I find myself a champion of the "golden mean," which, no doubt, will result in extremists of both sides belabouring me heartily! I believe that culture and civilization existed long prior to 5,000 B.C. I do not believe that such prehistoric cultures evolved scientific and mechanical techniques equal or superior to those our own possesses.

Jessup was probably right, too, in assuming that some disaster of an astronomical nature destroyed these ancient and now unknown civilizations. He supposed that a vast aggregation of meteoric material struck the Western Hemisphere. I would suggest that the catastrophe might equally have resulted from the impact upon the earth of such an asteroid as "Hermes," which passed us by in October 1937 at a distance of only 400,000 miles.

Reading between the lines in the writings of the orthodox archaeologists, as well as studying ancient legends and folk-tales, I have come to believe that the disaster, whatever its cause, destroyed a flourishing proto-civilization which existed in Central and South America. I do not believe that the UFOs owe their origin to this proto-civilization but I do believe that the UFO-denizens had some kind of contact with it - for all I know to the contrary they may have founded it.

Does this not account, in large measure, for the continual UFO activity reported from the American Continent in general and from South America in particular? May it not suggest the possible existence, in the vicinity of ruined cities hidden in the dense jungles of Amazonia and the Matto Grosso, of UFO bases? Colonel Fawcett, who was a practical explorer and no muddle-headed pseudo-mystic, lost his life in an attempt to reach one such city. It does not exist in the area he was attempting to reach - aerial reconnaissance has established that - but it may exist elsewhere and others like it. Even today, there are vast areas of South America which are virtually unmapped and virgin territory.

It may be significant that certain Venezuelan sightings in 1954 featured dwarfish, hairy creatures emerging from UFOs. Fawcett stated that the environs of the ancient cities were guarded by the dreaded Morcegos or Bat Indians, diminutive in stature, apelike and with hair-covered bodies.

It has been suggested that the shock and terror of the great catastrophe which destroyed the early civilizations, may have imparted a paranoid twist to later cultures, bringing about the rise of religious systems based upon the propitiation of angry gods by continual blood sacrifices. Homo sapiens is certainly a neurotic and aggressive creature at present. Perhaps the UFO-denizens fear him as a participant in their secrets and this may account for their aloofness and for the hostility which they sometimes display. It may even drive them, or may already have driven them, to attempt the conquest of a civilization which they may regard as impossible to come to terms with.

Once more I have been using creative imagination in an attempt to gain insight into matters outside the scope of exact knowledge as at present available to us. It may prove a useful exercise for readers to attempt to fill in the gaps in the picture I have painted. They may be surprised at the tableau which emerges.

I am always happy to receive letters from readers. When a reply is required, the enclosure of a stamped, addressed envelope will be very much appreciated.

Correspondence is answered as promptly as possible, but the "Journal" is a spare-time activity and delay is sometimes inevitable.

NEWSLETTER

Members wishing to receive copies of an unscheduled newsletter giving up to date news of the most important events and investigations, should send 5/- and six stamped addressed envelopes to :-

G. N. P. Stephenson,
Central Information & Research Co-ordinator,
12 Dorset Road,
Cheam, Sutton, Surrey.

RESEARCH MEETINGS

Members wishing to attend and actively participate in meetings held in London to study incoming reports and various aspects of research, should supply Mr. Stephenson with two stamped addressed envelopes marked "Research".

BEYOND THE FRINGE

At present the field of ufology stands in a position similar to that of mediaeval science, when one half of the active scientists were carrying out indiscriminate and uninformed experiments, mixing numerous elixirs in the improvised laboratories of their drawing rooms, achieving little more than colourful and detonative potions, although driven by a genuine quest for knowledge of the order which lay behind the phenomena if not in their course of investigation.

The other half of their number were devoting equal fervour to attempts to transmute the base metals, lead, iron, copper . . . anything, into gold or to concoct the elixir of eternal youth.

So in the study of unidentified flying objects the numerous attempts to co-ordinate and rationalise the various activities into an (almost) exact science are contemporaneous with a host of fringe 'alchemists' who profess having the true science at heart and bring with them a farrow of pseudo-religious and philosophical cults, which they claim to be closely, even intrinsically, linked to the UFO's.

The scriptures of these minor prophets is the well-documented belief that the method behind the visitations of the flying saucers is an almost sectarian attempt to save us from ourselves. This tenet is supported by the evidence that sightings increased after the dropping of the atomic bomb on Japan during the Second World War, and that similarly increased saucer activity accompanies further acts of man's inhumanity to man. But since there is always some hostility in progress somewhere, this theory cannot miss.

For some reason these dithyrambic cults seem to originate across the Atlantic, although Britain is not without its prophets who, inspired by the message of the saucers, go out into the world and readily acquire an enthusiastic following of disciples, willing and eager to learn their teachings, possibly as a replacement for some other belief which has failed to meet their requirements of it. It is interesting to note that many of these followers are aged and in so far as it gives such people something to believe in, I genuinely believe that such doctrines are not in themselves undesirable. The bar sinister lies in the way in which they associate themselves with ufology, bringing with them discredit and lending a hysterical face to a subject only too open to misinterpretation by the general public.

One of the best known Ufo-cults, that of the late George Adamski, is currently being furthered by a well-planned but ill-documented programme featuring the least convincing films of flying saucers I have ever seen. If these naive attempts do not discredit the cult once and for all - nothing will. The danger is that they may also discredit the genuine pursuit of true ufology.

To sum up, therefore, I repeat that there is nothing basically wrong with these philosophical and quasi-religious persuasions in their place, but as far as they link themselves to ufology - will no one rid us of these turbulent pseudo-priests ?

Malcolm Bull

POLICE CONSTABLE OBSERVES A UFO

BUFORA has received the following report from Police Constable Colin Clive Perks of Wilmslow, Cheshire.

"On the night of Thursday / Friday 6th. to 7th. January 1966, which was a cold clear night with a Full Moon which made visibility very good I was checking property at the rear of a large block of shops which are situated to the East of the A.34 Road, Alderley Road, Wilmslow, at 4.10 a.m. I heard a high-pitched whine and could not 'place' the noise, which was unfamiliar in those surroundings. I turned around and saw a green-grey glow in the sky, about 100 yards from me and 35 ft. up in the air The object was about the length of a 'bus, 30 ft. long, 20 ft. wide and 15 ft. high. It was elliptical in shape and emitted the eerie greenish-grey light. It appeared to be motionless - at anyrate there was no impression of rotation - and it had a flat bottom. The object remained stationary for about 5 seconds, then, without any change in the whine, it started moving. It moved very rapidly in an ESE direction. When it moved it did not appear to rotate but moved off sideways with the 30 ft. side to the front and rear. It is possible the short side, given as 20 ft., may have been longer, as I was looking under the object at the time and may have been deceived. The object was of a sharp, distinctive and definite shape and of a solid substance. I did not notice any vents, portholes or other means of access to the interior. The glow was from the exterior and was the only light visible. I checked with Jodrell Bank and Manchester Airport shortly after the incident but they could not help or in any way account for what I had seen."

EVALUATION :

I have very slightly condensed the above report and have made a few minor changes in wording in order to render it more easily understandable. The overall impression is, indeed, one of a truthful and conscientious public servant attempting to describe a phenomenon totally outside the range of his ordinary experience. It is to be noted that Constable Perks reported the incident to his superiors, which he would hardly have done if he had not seen the object, since flying-saucer spotting is hardly an 'Open Sesame' to promotion in the Police Forces of the U.K. This lack of motive rules out hoax and I am at a loss to explain away the sighting in conventional terms. Hallucination would seem to be the only remaining "out" for the sceptic. Only - is it at all likely that a policeman on his beat, inspecting properties for possible signs of unlawful entry, will, all of a sudden, begin to see visions and dream dreams? ANY UFO report involving one or two witnesses could be due to hallucination, of course. One is obliged to fall back on commonsense, which forbids the introduction of such an explanation in cases which do not exhibit any obvious reasons why otherwise normal persons should suddenly become the prey of gross delusion.

It is interesting to speculate on the possible reasons for the UFO being where it was at 4 a.m. on a January morning. The old Cultist chestnuts, "survey" and "mission," hardly fit the case. What are these low-hovering UFOs really up to?

J. C-B.

UFO POSSIBLE CAUSE OF ROAD TRAGEDY IN AUSTRALIA

The following report is taken from the Australian Press.

A car ran off the Bendigo-St. Arnaud Rd. last Thursday night, killing its 19-year-old driver.

Police went to the spot at the week-end with a local businessman who told of a strange thing that happened to him at the same place last Monday.

Mr. Ronald F. Sullivan, 38, builder, of Victoria St., Maryborough, said today :

"The headlights on my car were suddenly diverted to the right for no apparent reason — and if I had followed them I would have run off the straight stretch of road.

"The fact that I am an experienced driver and know the district well saved my life. I managed to stop before I crashed.

"Just then I saw a display of gaseous lights in all the colors of the spectrum in a nearby paddock.

"The object rose about 10 feet in the air. It later disappeared."

Mr. Sullivan drove on to Wycheproof where he had his headlights checked. They were found to be in perfect order.

He returned to Maryborough on Wednesday and went to the crash scene on Friday - to discover it was the same spot where 19-year-old Gary Taylor, of Grandview Drive, Carnegie, was killed at 11.30 on Thursday night.

A circular depression

The crash, Victoria's first road fatality for Easter, was near Bealiba, 120 miles north-west of Melbourne.

The police were then officially notified and made an investigation.

"We all noticed there was a depression in the freshly ploughed paddock about 50 feet from the fence," Mr. Sullivan said.

The depression was circular and varied from two to five inches in depth. It was about five feet in diameter.

"I have been reluctant until now to mention this queer set of circumstances publicly," Mr. Sullivan said today. "I have always regarded people who see such things as crackpots, and wanted to save myself embarrassment.

"But this phenomenal thing has actually happened to me."

Maryborough police said Mr. Sullivan was an intelligent and highly respected businessman in the town.

A blood test on the dead youth showed he had not consumed any alcohol before the accident.

On straight road

The crash was on a stretch of straight bitumen road about nine miles east of Bealiba.

It was a moonlit night when Mr. Sullivan's headlights were deflected. On the night of the fatality it was cloudy.

Police at Maryborough, Castlemaine, Bealiba and Newstead said today they had all heard reports of flying saucers seen in the area. The police were non-committal on how seriously they regarded the report. "Often we can find an explanation, but it takes time," one local policeman said.

Proud of his car

Gary Taylor, an electrical mechanic, was proud of his car, his father, Mr. R. S. Taylor, said today.

"It was his first car and his pride and joy. He kept it in perfect order," Mr. Taylor said.

Gary was an only son. He had two sisters.

Mrs. Taylor said this afternoon that Gary was a very cautious driver.

EVALUATION :

By courtesy of Mr. Eric Livingstone and the Victorian Flying Saucer Research Society, BUFORA has a copy of Mr. Sullivan's written account of the incident, which does not differ in any material particular from the newspaper narrative.

The incident occurred about 35 miles from Maryborough, Victoria, on April 4th. 1966. Time given as 8 a.m., which presumably is Zone Standard Time and 10 hours ahead of GMT.

I can see no alternative to the view that what Mr. Sullivan encountered was a UFO of some kind. A hoaxer would have risked detection and any sort of phenomenon resembling the Ignis Fatuus would not appear multi-coloured and in the vicinity of a paddock. There is, in any case, the deflection of the car headlights to be accounted for.

If the death of Gary Taylor is attributable to a visitation of the same or a similar object, it is plausible to assume that the unfortunate young man, when his headlights bent to the right and illuminated trees by the roadside, pulled his wheel violently to the left in fear of a collision and caused the vehicle to go out of control.

One wonders whether other inexplicable accidents on lonely roads may not be due, in some instances, to encounters with UFOs.

J. C-B.

ANNUAL GENERAL MEETING, 1966

In accordance with the provision of Article 8 (d) of the Constitution of B.U. F.O.R.A., preliminary notification is given herewith that the Annual General Meeting of the Association will be held on Saturday, November 26th. 1966, at 7 p.m., probably at Kensington Central Library.

Nominations for the offices of President and Vice-President, also Chairman, Vice-Chairman, Honorary Secretary and Honorary Treasurer and for the eight remaining seats on the National Executive Committee, should reach the Honorary Secretary, in writing, not later than Saturday, October 15th. 1966. Resolutions to be debated at the A.G.M. should also reach the Hon. Secretary by that date, for inclusion on the Agenda of the Meeting.

In the event that no rival nominations are received in respect of any of the above-listed offices and seats, the members at present occupying same shall be deemed to be re-elected unopposed. An uncontested office or seat falling vacant before the A.G.M., will be filled by nomination and voting at the Meeting.

It should be noted that offices other than those listed are filled by appointment of the Committee.

Only members of the Association in good standing, i.e. in possession of a current membership-card, are entitled to vote at the A.G.M.

Address of the Honorary General Secretary :

Michael Holt B.A.,
Hon. Secretary - BUFORA,
Bramhall,
Claremont Road,
Claygate, Surrey.

ON BEING (THOUGHT) A CRANK !

My dictionary defines a crank as 'an eccentric person, especially one enthusiastically possessed by a crotchet or hobby' - a crotchet it defines as 'a whimsical fancy'. Roget in his wisdom classes crank together with madman, lunatic, candidate for Bedlam, hypochondriac and auto-, mono-, pyro-, megal-, dipso-, and kleptomaniac.

However, in modern Britain, at least, the term seems popularly to be more broadly defined as anyone whose mind is on other things than Bingo, or 'what's on the telly?' - in other words the minority interests.

The term whimsical fancy hardly seems appropriate, since in most cases the pursuit of these minority interests is ipso facto expensive, as specialist books are not to be found in most libraries and often have to be bought - even imported - by the enthusiast. This expense would quickly dampen the ardour and zeal of all but the serious-minded crank, and would certainly extinguish any whimsy or caprice.

These people - the non-cranks - who may be inclined to laugh at the crank - have they never known the delight (or otherwise) when the local librarian looks over the top of his (more usually her) spectacles at you and, pointing to a copy of 'Flying Saucers through the Ages' or 'A Survey of Icelandic Literature' or 'The Decipherment of the Egyptian Hieroglyphics', says (usually quite loudly) : "I thought you might take this one out!" and then quickly covers it with the other books lest your fellow-borrowers should see that you are not taking out the 'Kamasutra' or 'France in Ninety Naughty Poses' ?

Have they never had the postman come to their door, in his hand a bundle of leaflets on books dealing with the occult and borderline sciences, and say "The envelope was accidentally destroyed" and/or, "The address was illegible, but we thought these might be for you!"

"We thought these might be for you!" Fame at last! - admittedly still in its embryonic form within the confines of the local G.P.O., but fame none-the-less. Come the day when the postman says : ". . . we knew these were for you!" - then you have arrived.

Perhaps that is why we like being cranks - cheap fame!

Perhaps that is why we study these minority subjects in preference to such broader fields as English literature or medicine as a hobby - better a big fish in a small pond, than a small fish in a big pond!

Perhaps that is why qualified types, possibly small fish in such big ponds as the sciences and so on, devote an interest to such topics as unidentified flying objects - in the land of the blind the one-eyed man is king!

It seems that after has been said and done, whatever motivates us into being cranks, we shall constitute just another chapter in the growing tome of twentieth century psychology. And a crank is in the eye of the beholder, or the psychiatrist!

Thought for the day: What do they call someone who studies UFOs and plays Bingo?

Paul Huizinga

BRADFORD CONVENTION

On SATURDAY, SEPTEMBER 10th, The HALIFAX BRANCH of BUFORA will be acting as hosts for a Convention to be held at the TEXTILE HALL, Westgate, Bradford, 1.

Programme : 11 to 12 a.m. Registration and informal get-together over coffee. 2 to 6.30 p.m. Talk by Arthur Shuttlewood on Warminster, other lectures to be announced. After TEA, there will be a symposium on 'U.F.O.' Research, Its Significance and Difficulties'.

After 6.30 p.m. Convention closed but facilities for informal discussions.

Full details from : Mr. Trevor Whitaker, Hon. Secretary - BUFORA HALIFAX BRANCH, Elm Dene, 253, Huddersfield Road, Halifax, Yorkshire.

CAMBRIDGE CONGRESS

On SATURDAY, OCTOBER 22nd, The CAMBRIDGE UNIVERSITY GROUP for the INVESTIGATION of UFOs will be acting as hosts for BUFORA ANNUAL CONGRESS, which will be held in the UNION SOCIETY CHAMBER.

Start 3.00 p.m. Talk on Historical Sightings; Scientific procedure for the investigation of UFOs.; Talk by guest Cambridge Scientist; Exhibition of UFO material. Evening DINNER (approx. 10/-) at a Cambridge restaurant. Evening meeting for MEMBERS ONLY. Anyone wishing to stay the night should contact the Secretary (B. & B. approx. £1.) a.s.a.p. Visitors may like to go sight-seeing in Cambridge on Sunday.

Full details from : Mr. A. C. H. Durham, Hon. Sec., CUGIUFOs, Clare College, Cambridge.

UFO SIGHTING AT PORTLAND

There were more than a dozen witnesses of this incident, which happened on the Chesil Beach at Portland, Dorset, 17th. March, 1966, 20.15 hrs. G.M.T.

Over the West Bay, roughly SSW, a group of three round, bright, orange-coloured objects hung suspended in the sky. The formation was spaced in a triangular formation and was visible for about 15 minutes. No sounds were heard. Eventually, the two orange lights forming the base of the triangle moved slowly towards the light at the apex and merged with it, after which this remaining light all at once disappeared.

At about the time the orange lights were observed, a Sea Vixen aircraft crashed in the sea off Portland Bill and the body of the pilot was later recovered.

EVALUATION :

I am unable to account for the triangle of orange lights in terms of any natural phenomenon or known aerial objects. The most plausible supposition would seem to be that three UFOs were involved.

There was an air exercise taking place on the evening of the sighting and it may be that the UFOs were observing it. Did the ill-fated Sea Vixen approach them too closely?

J. C-B.

THE PROBLEMS OF EXOBIOLOGY

Part III : Life beyond the Solar System.

Introduction :

In the first two parts of this article we considered the various processes that led to the evolution of Man. We now have to ask, and answer, the question : "Could a similar process have occurred beyond the Solar System ; and if not, are there any other possible chemical processes that could lead to an alien form of life?"

The first part of the question hinges on the conditions required for the generation of life. If we can show that these conditions are not special to the Solar System then the probability of their being attained elsewhere is immediately enhanced. **100,000,000,000 Suns.**

If the reader would refer again to the Summary to part II of this series he will there find the conditions for evolution that we drew from our observations of the Solar System. Should he not have the last Journal to hand, here is a brief list of the five points there made.

- (i) Evolution is a highly complex process.
- (ii) Evolution has taken 2,000,000,000 years on this Earth.
- (iii) The Sun is a stable star.
- (iv) The Earth's orbit is stable and very nearly circular.
- (v) The Earth lies in the habitable zone of the Sun's surroundings.

Obviously the complexity of the evolutionary process is not dependent on any characteristic special to the Earth ; neither is the age nor the stability of the Earth-Sun system since astronomers have found a great many stars of suitable type to harbour a viable planet among the millions of millions in this galaxy. There is nothing special about our Sun. It is a perfectly normal stable star with a surface temperature around 6000 to 7000°C, slightly cooler than average and also rather less luminous. It is, however, well removed from the extremes of the red dwarfs and giants and the highly luminous stars at the upper end of the temperature scale. Spectroscopic analysis of the light from many stars, a task which fills the greater part of the professional astronomer's time, has shown us two things. Firstly a large proportion of stars are of similar type to the Sun and secondly, and more significantly, many stars rotate slowly for their size.

The Spectroscopic evidence.

The reader may well wonder how it is possible to measure the rotational speed of a star from a great distance when all that can be seen in the largest of telescopes is a fine pin-point of light. The instrument that does the task for us is the same spectroscope that gives us the information on the temperatures and constituents elements of the stars. If a star is rotating then one edge of the side seen from Earth will always be moving away from us. Similarly the other edge will be moving towards us. Thus the wavelength of light from one edge of the star will be slightly longer than that from the other edge. This change in wavelength will 'shift' any spectral lines in the star's light towards the red (for those approaching). If we were able to look first at one edge of the star and then the other, we would be able to photograph the spectrum from each and then compare the positions of the lines in the two photographs. The image of a star, however, is far too small to use this method on, so a photograph of the spectrum of a star shows the spectra of both sides superimposed. The effect is to broaden the lines in the spectrum. This broadening can be measured and the rate of rotation deduced from the degree of broadening. Despite the fact that actual rotation rates cannot be measured with any high degree of accuracy, the results are sufficient to show the order of magnitude of the rate.

The rates show that there are two classes of stars : Those with rotation speeds high for their masses and those with them low for their masses. The reader will have noticed no doubt the manner in which a skater produces a fast spin by drawing in his arms, and slows down again by holding them out. In the same way a star could lose a great deal of its spin by throwing out arms of matter which might eventually form planets. This is thought to be the case with the stars with low spins for their masses. Certainly one star (the Sun) with a slow rate of spin has a planetary system.

The positional evidence.

Thus far we have managed to sort out a proportion of stars that could have planetary systems orbiting about them and we have found a method of detecting suspected systems with the spectroscope. However as we are on uncertain ground in this search for life beyond the Solar System it would be better to consult a second opinion. Is there any other way of detecting other planetary systems? As many readers will be aware, there is of course another method open to us. If a star has a family of planets in attendance then the whole system of bodies will rotate about the common centre of gravity of the system. This is true for any pair of bodies or system of bodies in space. For example the Moon, strictly speaking, does not revolve about the Earth, but the Earth and Moon both revolve about their common centre of gravity. For the Earth-Moon system this centre of gravity does not lie at the centre of the Earth but 2,975 miles from it in the direction of the Moon. Thus the Earth goes round its orbit in a series of waves each lasting 28 days or one Lunar cycle. The Solar System as a whole has its own centre of gravity and this does not lie at the Sun's centre but at a point some distance from it. To an outside observer watching the Sun in its orbit about the centre of the galaxy, the Sun would show the same wavy or irregular type of path exhibited by the Earth. If he were not able to see the planets the outside observer could infer their presence from the irregularities in the Sun's motion. Similarly an Earth observer could watch other stars for irregularities that could be caused by planetary systems. Such observations have been made and two stars have been observed to have definite irregular motions. They are 61 Cygni B (irregularity detected by Strand in 1944) and Barnard's Star (by Van de Kamp in 1963). Similar motions may be detected in other stars but the greater the distance of such stars the harder it is to measure the irregularities. The evidence, however, is there for other planetary systems, and modern theories on the origin of our own Solar System certainly do not preclude the common occurrence of such systems.

The habitable zone and stellar evolution.

Now that we have shown that planetary systems themselves are not a rarity, it is time to consider the probability of such a system's actually being life bearing. For a planet to be life bearing it must be orbiting its star within the star's habitable zone, its biosphere. In the case of the Solar System only those planets in the Sun's biosphere (Venus, Earth and Mars) support life. What are the chances of a planet's being in the right orbit - fairly remote; but they are fortunately enhanced by a second factor - stellar evolution. It is thought that the Sun is gradually becoming more luminous as it "burns up" its store of hydrogen and helium. This gradual increase in heat and light output could be a condition generally found among the stars of the same and similar classes to the Sun. Thus for a planet eventually to be a harbour of life it need only either be in its star's biosphere or be just beyond it.

100,000,000 Earths.

There is now just one final question to be settled. The Solar System is clearly divided into two parts, the terrestrial planets and the giant planets. Mercury, Venus, Earth and Mars (Pluto too possibly) belong to the former group: Jupiter, Saturn, Uranus and Neptune to the latter. Why is it that the terrestrial planets lie nearer the Sun's biosphere, and the giant planets beyond? Why is Jupiter not a frozen Earth or Earth a gaseous, warmer version of Jupiter, since both were formed at the same time?

The answer lies in the explanation of how the Solar System was created. If we accept the condensing nebula theory, in which the planets were formed from a condensing disk of gas, then there is a natural explanation for the heavier elements' being nearer the Sun through gravitational attraction. Further the stream of ionised particles that make up the Solar wind would tend to carry away the lighter elements from the nearer planets but would not have sufficient power to remove them from the outer planets. There are of course further factors to bring in, for example planetary masses and the amount of heat each planet receives from the Sun, but it is clear that the coincidence of a terrestrial type planet within the Sun's biosphere is not such an improbable event as we originally thought.

5,000,000 super-races.

We have now covered the whole question of habitable planets beyond the Solar System qualitatively; but let us try to bring the question into perspective by drawing up a table to show the relative number of suspected planets with human beings or humanoids on them.

| | |
|---|-----------------|
| Stars in the galaxy : | 100,000,000,000 |
| Stars with planets (conservative estimate, 10%) : | 10,000,000,000 |
| Planets within biospheres (3 out of 10 as, roughly, in the Solar System) : | 3,000,000,000 |
| Planets with life on them at the primate level : | 1,000,000,000 |
| Communities at a level of technological evolution comparable to Earth : | 100,000,000 |
| Communities capable of space travel : | 50,000,000 |
| Communities capable of interstellar travel : | 5,000,000 |

Admittedly the last three items are even cruder guesses than the preceding estimates but I feel that the reader will agree with my proportions at this stage. This leaves us with 20,000 stars for every community capable of inter-stellar travel. Since our galaxy is about 100,000 light-years in diameter and 3,000 light-years in thickness, on average the communities are 170 light-years apart.

Interstellar travel.

Now since as far as we know, the speed of light cannot be exceeded and also that it appears to be constant throughout the galaxy (but not necessarily the Universe) there are only two possibilities open to the communities capable of inter-stellar travel, either the possession of a far greater life-span or hypertravel. The first of these is a distinct possibility. An intelligent being with a life-span of 300 years would not necessarily stop at the idea of spending 200 years in space. Moreover my estimate of 170 light-years between the communities is an average value and as such is not the rule for all or any of the communities. Some may only be a few light-years apart (especially near the centre of the galaxy), others may be many hundreds of light-years from their nearest neighbours. For the latter existence is probably lonely. Maybe the Sun is in a sparsely populated area of the galaxy, maybe not; we just do not know as yet.

The suggestion of hypertravel brings us into the realm of the science fiction writer. Whether hypertravel, or travel in four spacial dimensions is possible or not is not a question that can be answered. Hypertravel is a concept dreamed up by the science fiction writer to get over the relativistic trouble of the speed of light and should be treated as the philosophic fantasy that it is.

Bug-eyed monsters.

Leaving aside the possibilities for travel used by the science fiction writer, let us examine the various ideas he has produced for alien sociologies and biologies. Could these alien life-forms have evolved to an intelligent level? The commonest type of alien life-form envisaged by the fiction writer is of terrestrial type. Their creatures are sometimes humanoid but also frequently are of the 'bug-eyed monster' variety. Biologically these creatures are completely acceptable. Even on Earth the complexity and variety of form among the animals is bewildering. One restriction on the viability of the alien terrestrial animal is size. To be able to evolve a large enough brain for intelligent technological thought an animal must have sufficient physical size. Stories of tiny insect-like creatures of high intelligence must be excluded from the realms of scientific fiction. They are mere fantasies contradicting logical argument. But what of intelligent plants? Are these out of the question?

The answer is yes, because a plant by definition uses a photosynthetic process for producing the energy it requires for living. An animal, a mobile creature, consumes a large amount of energy. It needs this energy at irregular intervals and in quick supply. An intelligent plant would have to have a large leaf area to collect energy in sufficient quantity and the necessary appendages would render it immobile and therefore incapable of manufacture of tools and goods - a process inherently carried out by a civilised community.

Alien chemistries.

Apart from the restriction of size on an alien being, there is a second restriction, that of a suitable hereditary system for replicating the species. Such a system I outlined in part 1 while explaining the significance of the nucleic acid system in Man. If no other chemical systems exist, then only terrestrial type worlds will be found. Chemically alien systems will be out of the question. Can we be sure other systems do not exist and work?

Obviously not, because firstly we have no experience of them and secondly we may not be able to synthesise them here on Earth. Let us examine the possibilities. We can dream up a fluoro-carbon system comparable to our hydro-carbon system, or a phosphorus-nitrogen chain with chlorine in the place of hydrogen in the side-chains, or again the silicone chain, or a metallic chain based on tin or germanium. All such ideas are feasible till we try to find a reaction medium for their use in a viable system. A reaction medium is necessary for the process of energy transfer and replication. On Earth this medium is water. For the phosphorus-nitrogen-chlorine chain world water would be as corrosive as mustard gas is to us. The seas would be made up of a liquid chloride or oxychloride of phosphorus, sulphur or even arsenic. The silicon Man would be in a similar trouble with water as his solvent because silicon chemistry requires high temperatures well above the boiling point of water. For his world the solvent would have to be a liquid salt like potassium nitrate (saltpetre) or sodium chloride (common salt) requiring temperatures in excess of 800°C (1400°F). Men with metallic chains in their chemical anatomy would find oxygen lethal and we would have great difficulties in finding a suitable reaction solvent for them.

Black clouds and disembodied minds.

Two further forms of life are sometimes postulated by science fiction writers. The first is the colony of microscopic or submicroscopic entities, individually useless but collectively highly intelligent. The other is the 'Overmind' of Arthur C. Clarke in "Childhoods End" and 'Vanamonde' in "The City and the Stars", the tenuous 'Black Cloud' in Fred Hoyle's book of the same name. These fantastic forms of intelligence lack only one characteristic of the intelligent beings of our experience - a permanent arrangement for the function of memory.

Summary and conclusion.

Most of the last part of my article has been concerned with fantasy and the question as to whether it has any basis in scientific logic, but some conclusions can be extracted from it and from this series as a whole.

We have seen that despite the fact that from a prima facie point of view our existence on this Earth is a combination of many small probabilities, the chances of there being other communities in our galaxy in a similar state of technological process are not remote. On the contrary we have estimated the number of communities as being about one hundred million, five per cent of which could be capable of interstellar travel. On this basis we find that communities in a position to meet and to trade are on the average 170 light-years apart. Between these communities in space there would exist other less advanced communities, incapable, as yet, of attaining such long-distance travel, either through a temporary lack of technological expertise or simply and permanently through having too short a life-span. Could it be that we are one of these backward communities and that several races about us are capable of trading with one another and sometimes come to the Solar System for materials for their own use? An interesting possibility.

S. L. Smith, B.A.

Acknowledgements.

A list of the authors from whose articles the information for this series has been collected follows by way of acknowledgement.

Bernal, Professor J. D., F.R.S., Head of Dept. of Physics, Birkbeck College, London University.

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Gaskell, Dr. T..

Good I. J., Trinity College, Oxford.

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Jackson, Dr. F., Kings College Hospital Medical School, London University.

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Mauser, A. R., University of Maryland.

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Stubbs, Dr. P.

Thomson, Dr. J. H., Manchester University.

Vernon, Dr. C., University College, London University.

Williams, Professor W. T., Southampton University.

EDITORIAL NOTE :

Professor M. M. Woolfson of the University of Manchester, has, in recent years, revived the Tidal Hypothesis of the late Sir James Jeans, which supposed that the Solar System arose out of a close approach of another star to our Sun. His findings are not just one more speculative contribution to Cosmogony, in that they provide a sound mathematical and physical basis for the Bode-Titius Law of Planetary Distances and a new and plausible account of the origin of the asteroids.

If the planets came into existence in the way pictured by Jeans and Woolfson, the number of stars having planets revolving around them within the narrow zones of their biospheres would be in the order of 1 in 100,000, or one million in all, as against the figure of three thousand millions cited by Stephen Smith as the total of potential life-bearing worlds within our Galaxy.

I feel further reductions might be necessary. The (relatively) crowded star-fields in the central regions of the Galaxy, as well as the outer reaches with their clouds of cosmic dust and vast aggregations of meteoric material, might be assumed not to provide the stability of conditions over very long periods of geological time which is required for the evolution of higher forms of life. Our Sun, let us say, is situated in the residential area of the Galaxy, removed from the star-factories in the town-centre and the slag-heaps and refuse-tips of the outskirts. In more precise terms, I am suggesting that the Galaxy, like the Solar System, has a biosphere. This may reduce the number of habitable worlds by about 50%, to half-a-million.

Binary and multiple star-systems would seem to provide unstable conditions, in all respects, for the development of life on planets circling them. We cannot say to what extent our own most unusual satellite, the Moon, has facilitated the evolution of life on Earth by raising tides in what would otherwise have been virtually stagnant oceans. There are a hundred-and-one other factors of which the absence or excess might have upset the delicate balance of life's climb from primordial protoplasm to Man. All things considered, I would be surprised at the simultaneous existence of 50 communities in the Galaxy capable of interstellar travel.

All such estimates are necessarily guesses, in a field in which real knowledge is, as yet, unobtainable. I would, however, in this connection, point to the immense prodigality of Nature. How many millions of acorns are wasted, as against the few which become oak-trees? Nature is not like a seaside landlady, who cannot rest contented until the house is crammed with boarders from cellar to attic!

Temperament may enter into all this, of course. Maybe Stephen Smith is gregarious at heart. For my part, I don't think I like these stellar communities only 170 light-years apart. Stand back and give me space! Who is in favour of overcrowding?

J. C-B.

ASSOCIATION JOTTINGS

Contributions in the shape of articles are needed for this "Journal." Previous appeals have produced a generous crop of promises but very little else. I can continue writing the whole thing *solus* for years if I have to - only would it not be more satisfactory to present readers with a cross-section of opinions and theories from various sources?

I note that two of our member-societies, D.I.G.A.P. and the Enfield UFO Investigation Society, are also members of the "Midland Interplanetary Association." This Body is what our American colleagues call "contactee-oriented." Independent UFO study-groups and societies have, of course, an absolute right to form what affiliations they please. It should be made quite clear, however, that BUFORA is NOT "contactee-oriented," although not unwilling to consider contact tales on the basis of such evidence as may be available in connection with them.

The results of "Warminster Week," to be held at the end of July, will be made known to members in the Autumn issue of this "Journal."

Will member-societies please oblige with a resumé of their activities from time to time, for inclusion in the "Journal?"

J. C-B.

THE VALLEE QUESTIONNAIRE

M. Jacques Vallée, scientist and author of a recent work on UFO-research, "Anatomy of a Phenomenon," has requested all UFO groups and societies willing to co-operate with him, to complete a Questionnaire concerned with their objects programmes and activities. BUFORA has been happy to comply with the request and the text of our answers to M. Vallée's sixteen questions follows.

The Association is sometimes accused of a narrow and illiberal approach to the problems of UFO-research. All genuinely scientific bodies in this field are exposed to similar charges - in the U.S., Major Keyhoe's N.I.C.A.P. has often been a target for such wild accusations - which are generally levelled by persons holding quasi-religious "cultist" views on the subject of UFOs.

UFO-research is not a "Movement" and is not concerned to propagate "beliefs" of any kind. Its object is to investigate UFO phenomena objectively and scientifically. Hence much of the heat and harsh talking. Omelettes cannot be made without breaking eggs! The pursuit of truth inevitably results in the exposure of fraud and error and the fraudulent and foolish dislike being criticized.

I do not believe that any great amount of deliberate fraud and dishonesty exist in our field. Cash rewards are too small and the risk of exposure is too great. It is folly, not fraud, which provides us with most of our major headaches. There are too many ill-informed enthusiasts who think they know all the answers and cannot be brought to realize that they don't even know half of the questions!

These well-meaning persons look around at the mess the world is in. They read a few books on UFOs and reach the conclusion - a correct one I would say - that alien intelligences are in our skies. How comforting and tidy and generally soul-satisfying to accept the word of the "contactees" that these aliens are kindly supermen, here to right wrongs and bring order out of international chaos.

So has arisen a considerable network of groups devoted to what is called "cosmic brotherhood" or something of the sort. Thousands of well-meaning individuals wallow in slushy platitudes and pseudo-spiritual reveries. It is all a one-sided form of activity, for the UFO-denizens remain aloof.

It may all depend on ourselves. Perhaps the indications of hostility on the part of the UFO-denizens are casual incidents or isolated warnings. I hope everything may work out as pleasantly as the "contactees" and the advocates of interstellar goodwill maintain it will. Until I see something in the shape of real proof, as opposed to mere dogmatic assertion, I'll continue to take my cue from hard facts rather than from fluid fancies.

Here follows the Vallée Questionnaire and the answers framed to its questions. I think these latter reveal BUFORA as quite a liberal-minded Organisation really!

**QUESTIONNAIRE SENT TO CIVILIAN UFO ORGANISATIONS
IN JANUARY 1965 BY M. JACQUES VALLEE.**

1. **Name of Organisation or Group.**
British Unidentified Flying Object Research Association.
2. **Date of creation.**
January, 1964, in its present form. It may be regarded as a development of the British U.F.O. Association, founded 1962, which was amalgamated with the London U.F.O. Research Organisation to constitute the present Body.
3. **Official address.**
H.Q. & Library :- c/o P. Wain, Esq.,
Kings Road, London, S.E.23.
Chairman :- G.G. Doel, Esq., M.R.C.S., L.R.C.P., D.M.R.E.,
26 Heath Drive, Potters Bar, Herts.
4. **Name of publication, if any.**
"The BUFORA Journal & Bulletin."
5. **Is this publication regular? Irregular?**
Regular, except for occasional delays in printing. It appears quarterly.
6. **How many issues have been published?**
Six, to the Autumn 1965 issue.
7. **Average No. of members in 1964.**
In that year the Association numbered between 250 and 300 individual members, in addition to 11 Member-Societies with the status of Corporate Members & two Branch-Organisations. Since 1964, membership has shown a slow but steady increase.
8. **Has your group arrived at a definite conclusion concerning the nature and/or origin of the UFO Phenomenon? Yes. No.**
No. The Association has never endorsed any interpretation of UFO phenomena as final and would not do so unless the evidence in favour of a given interpretation became overwhelming and irrefutable. However, please see answer to next question.
9. **If you answered 'Yes', what is the conclusion reached by your group?**
Since the answer to the last question is 'No', the present one is, strictly, irrelevant. It should be observed, however, that at least 90% of members of BUFORA adopt the hypothesis that UFOs are alien artifacts of an advanced technology, which usually involves the "space-ships" concept. Much of the Association's work is coloured by this premise.
10. **What are the books on UFOs your organisation recommends?**
I would imagine that most of our members would favour

Ruppelt, Keyhoe, Fort, Jung, Michel, Jessup & Lorenzen. Our Library, however, contains a wide selection of works, ranging from "contactee" narratives to the critical surveys of Tasker and Dr. Menzel.

11. What are, in your view, the five most significant observations of UFOs?

It is not clear how the relative importance of sightings can be assessed at this time. My own selection - which is made at random from a very much larger list of important sightings and which probably differs widely from that which others in the Association would advance - is as follows :-

1. Manhattan Beach, Calif., U.S.A. July 27, 1952.
2. Yarra Valley, Victoria, Australia, Jan.1, 1954.
3. Itaipu Fortress, Santos, Brazil, Nov. 4, 1957.
4. Trinitade Island, S. Atlantic, Jan. 16, 1958.
5. Antarctica, (various Bases), July 3, 1965.

I would stress that the above list has been compiled to indicate the sort of reports the Association is most interested in. It is not suggested that there is anything unique about the ones cited.

12. Do you think the 'contactees' should be believed?

The Association has never endorsed the claims of any 'contactee.' A Contact Section exists to investigate such reports on their merits. The Association does not seek to control the private opinions of its members on the subject of UFOS and it is probable that a significant minority of members are in some degree sympathetic to 'contactee' claims.

13. Do you think the authorities have obtained evidence of the nature or origin of the UFO phenomenon?

The official investigative agencies must hold more and better data than private organisations and it seems possible that some of the investigators have reached the sort of conclusions which many members of the Association have reached. It does not follow that the authorities have accepted such conclusions.

14. Do you think the information they have obtained is kept secret, and why?

It is a fact that the Air Ministry and Royal Air Force seldom divulge information concerning specific UFO sightings, either spontaneously or in answer to written enquiries. This is probably due in part to the demands of 'Security' and in part to the fear that irresponsible persons might make improper use of information supplied and thus unsettle the minds of the public. Any sort of organized conspiracy to suppress UFO information as such, seems unlikely.

15. Do you think descriptions of "UFO pilots" seen on the ground should be taken seriously?

Such reports should be investigated and evaluated on their merits.

16. Please give a summary of the general viewpoint of your group concerning the UFO problem, if it has not been covered by the questions above.

The Association's approach to UFO phenomena is a scientific one, i.e. its object is to reach the truth about UFOS by observation, experiment and induction.

Signed. J. Cleary-Baker, Ph.D.

Evaluation Officer & 'Journal' Editor.

3, Devenish Rd., Weeke, Winchester, Hants, England. 1st. April, 1966

NOTES & QUOTES

Accolade for a Newspaper.

The "Christian Science Monitor," widely read in this Country as well as in the United States, has published recently a number of pertinent criticisms of the evasive and misleading communiques issued by the U.S. Air Force on the subject of UFOs. There are signs that NICAP's book, "The UFO Evidence," has opened many eyes in the States to the disingenuous attitude of Pentagon press-releases on the subject.

The "Ufocals" Hypothesis.

Dr. P. M. H. Edwards, of Victoria, B.C., Canada, writes me as follows: "The Ufocals theory is very good: may I add to it the fact that these are not necessarily permanent, but seem to shift from place to place." I agree with Dr. Edwards and would add that the shifts to which he refers are probably connected with secular variations in the magnetic field in the localities involved.

A Book on Warminster's "Thing."

Mr. Arthur Shuttlewood, who is feature editor and news reporter of the "Warminster Journal," informs me that his forthcoming book on the "Thing" will include about 14 photographs of UFOs taken in the vicinity of this little Wiltshire town. Mr. Shuttlewood informs me that he and a small band of volunteer watchers have visited a local hilltop every clear night since February 26th. last. In view of the importance of the Warminster phenomena, it is indeed fortunate that one man on the spot has been moved to devote so much time, energy and devotion to studying them. I am looking forward to reading Mr. Shuttlewood's book and he has promised to write an article for this "Journal" on some of his skywatching experiences.

Our "Journal" Gets Around.

At the request of the Dag Hammarskjold Library of the United Nations, in New York, a copy of this "Journal" will in future be sent to the Library upon the appearance of each issue.

Who Knows What ?

"I know that the great dream of many of you is to make contact with life - and hopefully with intelligent life - perhaps on Mars, perhaps elsewhere in the Universe. I think that this prospect should give us renewed determination to order our affairs here on Earth. I hope that we shall move with increased urgency and dedication from our present perilously obsolescent international system into a new world order of freedom and justice under law."

— Vice President of the U.S. Humphrey, in a speech to the American Institute of Aeronautics & Astronautics & the American Astronomical Society, 28th. March, 1966.

A Curious Coincidence.

The Editorial in this issue of "BUFORA JOURNAL" was written on May 27th. On May 31st., four days later, I received a copy of James Moseley's "Saucer News" from the United States. On page 8, Wm. J. Dunn, Jr., (of whom I had never before heard), writes: "The author has a very good lead on an ancient Aztec city which existed in an area . . . just south of Fort Meyers, Florida. This city is greatly feared by the Seminole Indians today and there are some indications already that this ancient city housed a saucer base. This goes along with theories I have read to the effect that the Incan and Aztec civilizations . . . had connections with sort of 'sky people'."

"Do it Yourself" Flying Saucers.

Will amateur inventors please note that I am NOT prepared to badger the Air Ministry on their behalf, to arrange for tests on model flying saucers which they have constructed. It is comparatively easy to devise methods of propelling miniature saucers through the air. Full-sized versions of such constructions usually would not work. One reason for this, among others, is that whereas the weight of a machine increases as the cube of its size, its structural strength increases only as the square. Many of these inventions would collapse under their own weight if constructed.

A World Inside the Earth.

The fascinating idea that UFOs emanate from a land inside the earth, continues to crop up periodically in UFO circles. Unfortunately, much as one might wish that it were true, the notion is completely untenable from a scientific standpoint. If the planet were hollow, its mass would be other than it is known to be and its influence on other bodies in space would differ from what observations prove it to be in fact. Unless Nature is in a conspiracy to deceive the scientist and support the hollow earth believer - which seems rather unlikely - it must be accepted that the earth's interior is much as the geophysicists tell us it is.

J. C-B.

UFO SIGHTING REPORTS

Members and Non-members are requested to send details of all recent UFO reports they obtain by word of mouth or from newspapers, radio and magazines, etc., immediately to the Regional Information Officer for the area concerned in order that a local investigation can be started while the sighting is still fresh in the minds of the eye-witnesses.

Cumberland, Durham, Northumberland, North Riding of Yorkshire : Tyneside UFO Society : W. D. Muir, 72 Greystoke Avenue, Jesmond, Newcastle-upon-Tyne 2. Tel : Day : Gosforth 5-7111 Ext. 679. Evening & night : J.L. Otley : Newcastle 3-8025

Lancashire, Wirral Peninsula (Cheshire), Isle of Man, Anglesey, North Wales : Merseyside UFO Research Society : R. Donnelly, 2 Buckfast Close, Liverpool 10. Tel : A. Rawlinson : Anfield 6921.

Cheshire, Derbyshire, Staffordshire, Leicestershire : Direct Investigation Group on Aerial Phenomena : P. Heffron, 37 Lea Dale Green, Leyland, Nr. Preston, Lancs. Tel : Leyland 21734 ; (or Tel : Mrs. J. Nelstrop : Bramhall 4802.)

Lincolnshire, Nottinghamshire, East & West Ridings of Yorkshire : Halifax Branch : J. M. Stear, 2 High Park Crescent, Heaton, Bradford 9. Tel : Bradford 41842.

Nottinghamshire : Nottingham UFOs Group : M. A. Kenyon, 112 Calverton Rd., Arnold, Nottingham.

North-east half of Gloucestershire, Herefordshire, Shropshire, Worcestershire, Wales south of and including Cardiganshire & Montgomeryshire : Cheltenham Flying Saucer Group : A. R. Cole, Ellesmere, 7 Okua Rd., Charlton Kings, Glos. Tel : J. Whitaker : Cheltenham 53864.

Warwickshire : Stratford-on Avon UFO Group : J. D. Llewellyn, 63 Masons Rd., Stratford-on-Avon, Warwickshire.

Bedfordshire, Cambridgeshire, Huntingdonshire, Norfolk, Northamptonshire, Rutland, Suffolk : Cambridge University Group for the Investigation of UFOs : Easter term : 20th April to 10th June : A. C. H. Durham, Clare College, Cambridge. Vacations : J. A. Popple, 10 Kingsmead Road, Waterbeach, Cambs. Tel : (all year round) Waterbeach 660 or (day) : Cambridge 55691.

Berkshire, Buckinghamshire, Oxfordshire : Oxford University UFOs Study Group : T. A. Williamson, Brasenose College, Oxford.

Cornwall, Devon, Dorset, South-western half of Gloucestershire, Somerset, Wiltshire : British Flying Saucer Bureau : G.F.N. Knewstub, A.M.Brit.I.R.E., A.Inst.E., 27 Avonmouth Road, Shirehampton, Bristol. Tel : Avonmouth 2288.

Hampshire, Isle of Wight : Isle of Wight UFO Investigation Society : F. W. Smith, 4 Connaught Road, East Cowes, I.O.W.

Surrey : Croydon UFO Research & Investigation Society : H. Roberts, 47 Brigstock Rd., Thornton Heath, Surrey. Tel : THOrnton Heath 8480.

Scotland : Scottish UFO Research Society : Glen Chandler, 11 Lismore Crescent, Edinburgh 8. Tel : Abbeyhill 3025.

Northern Ireland : T. Thompson, 23 Mountainvale Rd., Newtownabbey, Co. Antrim.

London, Essex, Hertfordshire, Kent, Middlesex, Sussex : Central Information Office : Ken Rogers, 1 Vicar's Moor Lane, Winchmore Hill, London, N.21. Tel : LABurnum 2482 : Personal enquiries answered 8.30 - 10.30 a.m. & 8.00 - 10.30 p.m. weekdays ; reports taken at all times. (Alternative Tel : N. T. Oliver : LEE Green 7653.)

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