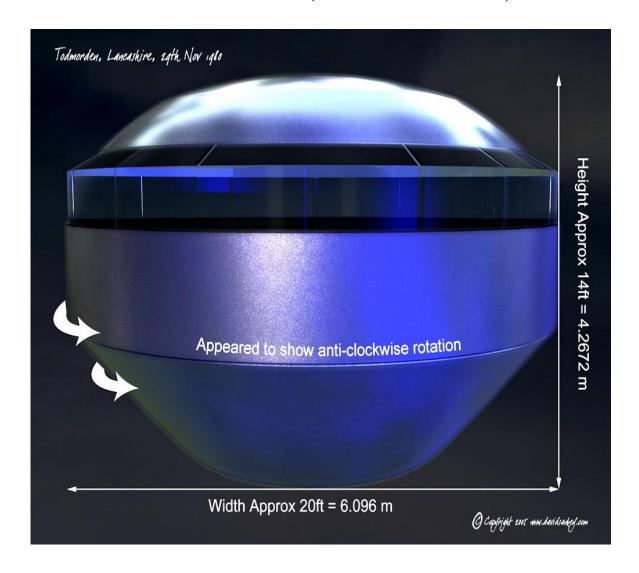
UFO STUDY

A Handbook for Enthusiasts

SECOND EDITION (2009: version 2.161).



Jenny Randles.

Updated by Robert Moore

Part 1: UFO Investigation.

UFO STUDY

A Handbook for Enthusiasts

Part 1 - UFO Investigation

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INTRODUCTION TO THE SECOND EDITION.

This manuscript represents Part One of an updated and expanded version of Jenny Randles' classic work *UFO Study* (originally published in 1981); this particular work including the text relevant to UFO investigation. When first presented this book presented a unique attempt to provide a concise guide to many required skills and techniques. It was especially noteworthy in being written from a largely British perspective, in a form accessible to a general audience. This important work has unfortunately been too long out of print; hence, the decision was made to issue this amended PDF edition of *UFO Study* (split into two sections to facilitate downloading). In both parts much of the original text has been retained, but updated and expanded to fully reflect the realities - and also the opportunities - of 21st century ufology. It is hoped the act of making this work freely available will aid the proliferation of "best practice" within British UFO investigation.

Since the first edition of this work was written there have been a number of significant developments within the subject. UFOIN, an active body in 1981 and featured widely here, eventually merged into BUFORA a few years later. Two decades later various social changes (most notably the proliferation of the Internet – which indirectly made information on UFOs more widely available) resulted in BUFORA having to effectively downsize itself in order to weather this situation. In 2007 many local groups persist, but - for reasons too complicated to go into here - the various co-operative initiatives that effectively defined British Ufology during the 1970's and 1980's are no longer in vogue. UFO reports (at the time of writing) are also now more rarefied than in 1981, although significant events still nonetheless occur. Successive technological innovations have also resulted in the widespread use of powerful multi-media computers and similar digitalbased devices over the past three decades. While this has revolutionised the field of interpersonal communications (as most notably represented by the Internet) it has also resulted in the proliferation of sophisticated graphic software capable of fabricating highly realistic UFO images. Lastly, some would also argue the UFO phenomenon itself has also notably changed over the past three decades – the subject being presently dominated by sightings of "flying triangles" and "alien abduction" claims. Nonetheless, the knowledge base encapsulated within UFO Study remains as valid and relevant in 2007 as it was in 1981! Robert Moore. November 2007 (V 2.151).

Acknowledgements:

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1: WHY UFOLOGY?

You are interested in UFOs. Presumably this simple fact must be true, otherwise you would not be reading this. Of course, you are by no means alone in this interest. The subject has captured the imagination of millions from almost every part of the world.

UFOLOGY is the name that we give to the study of UFOs, in one form or another. There are numerous UFOLOGISTS active in Britain today, with many thousands scattered throughout the globe. Some are scientists; physicists, mathematicians, psychologists and others - each looking at the particular aspect of the subject that especially fascinates them. The majority, however, are ordinary people - men and women with an amazing range of occupations. There are postmen and policemen; there are plumbers and airline pilots; there have even been several lords! Anyone is qualified to study UFOs. These are the people who are helping to push forward the frontiers of our knowledge. They are the pioneers for ufology is still in its infancy. In the study of UFOs the man in the street stands level with the Ph.D. Everyone remains an amateur in an unknown field and, although there are those whose understanding inevitably surpasses that of others, there are really no experts.

Nobody knows for sure, as yet, what UFOs are. So this is the subject into which you are feeling your way. You may have been interested for many years and need a guideline to develop your studies. Whoever you are, and whatever your viewpoints, you could - in time - provide a real breakthrough. You could be the one who, like Archimedes, will jump up and run around shouting "eureka" (although not, I hope, like him, in the nude!). This is the great excitement of UFO study, because although we make slow and steady progress nobody knows where the next insight will come from. Before we start to look at some reasons why you might wish to study UFOs it would be wise to set down just what it is we are talking about. No doubt you have a fair idea of what you would call a UFO, based upon what you have read about in various media, or seen on television. Yet we are endeavoring to make ufology a scientific pursuit, and to do this we need definitions.

So let us think in terms of a UFO as:

A stimulus, visual or otherwise, that provides the percipient with information about an unidentified phenomenon that appears to him to be in, or originate from, the atmosphere or beyond.

You might think that this is a long-winded way of stating the obvious, but in fact this definition is fairly specific and precise and concerns what I feel you should regard as a UFO.

A visual stimulus is, literally, "something seen" - but this term does not imply that a real, physical object was there. All that it does mean is that the brain cells responsible registered the presence of a stimulus on the optical circuits. This, then, can cover dreams and hallucinations, and whilst I am not claiming that all - or at this stage even any - UFO sightings are so related, our definition needs to cover such a possibility. The percipient is simply the person who perceives the phenomenon.

Terminology is, as you will see, important in the UFO world. You will find a more detailed consideration of some of these problems later in this work.

This proposed definition of a UFO gives us a clearer idea of the range of the problem. One witness may not be able to identify an event that to another is perfectly explicable. Again, the percipient might interpret the object he sees (on the ground or in the sky) as originating from beyond the atmosphere without fully objective reasons for such a conclusion. Also, of course, we have seen that our definition includes dream-like events. It is apparent therefore, that there is no clear-cut division between what ufologists are called upon to deal with and what they are not. There are a variety of combinations - all of which could be regarded, for our present purposes, as a UFO.

I think it should already be clear that ufology is not an easy subject with which to come to terms. However, it is a challenge that is open to anyone. Some common sense and perseverance are required in order to understand the many related problems that intertwine to create ufology. Whilst you can gain some understanding by reading books and magazines - and we provide a list of significant UFO books on page 137 - the only way really to get to grips with the mystery is to confront it head on. One must become involved and gain experience, learning from successes and mistakes.

The main aim of this book is to act as your guide on this voyage of discovery. It will introduce you to the basic problems, and set you thinking along the correct lines. It will also provide suggestions as to how you can teach yourself ufology. However, it is not only for the beginner. There is a lot here that will be of relevance even to the seasoned ufologist.

Your interest in UFOs may well have been fired simply by reading about them. On the other hand, it may have been stimulated by a personal experience, for to be confronted with something that logic tells you does not exist is certainly a challenge to the human spirit. Of course it may be that you have a wide-ranging interest in strange phenomena of one kind or another. Books about historical mysteries, anomalous animal sightings, ghosts and other such bizarre mysteries may be consumed avidly. This is by no means a bad thing, because there does seem to be an undeniable, but still unraveled, thread that joins some of these unexplained enigmas together.

Whatever the reasons why you become involved, there are really four basic motivations

for taking up UFO study seriously. These can be summarized as follows:

1) PURE INTEREST

Mysteries may tantalize your curiosity. You might itch inside to puzzle over and solve them. In this case ufology offers considerable scope because it is indeed a baffling mystery. These strange things have been reported for a long time and there seems to be every possibility that they are of some importance - although the answer (or answers) might lie in several different directions. Whatever the case, a deeper understanding of the mechanics of UFO study will, I believe, serve to make you even more curious.

This book will help you gain a deeper understanding by looking at the various aspects of the subject and some of the controversies involved. It will also offer you pathways to follow to take you higher up the mountain. Even if you are not particularly interested in doing anything other than learn more about the subject, you should find the chapters regarding direct involvement of value. They will add further links in the complex chain of understanding, and indeed you cannot possibly learn all there is to know without a basic appreciation of the methods and problems of the investigator or researcher.

2) UNDERSTANDING OF LIFE

It is the opinion of many people that an understanding of the nature of the UFO phenomenon will teach them a great deal about life. They think this for several reasons. It could be that they place a religious interpretation on the events described by the witnesses. There may be some justification for this viewpoint. There is also more than a small possibility that part of the answer to the questions posed lies in certain hidden facets of human potential. It is believed that these facets, when understood, will make a deep impression upon an individual's conception of the universe and its workings, or on the very essence of human life itself.

Whilst I would stress that it may prove to be that UFOs do not really tell us very much, if anything, about such fundamental issues it does seem likely - on the basis of present evidence - that some insight into at least one of them will be gained. Even so, there is a kind of `spin-off' benefit. An understanding of the UFO phenomenon, particularly those aspects involved on the investigation side, teaches a considerable amount about human psychology, perception and motivation. Indeed, there are some people who feel that these factors alone justify an interest in the subject.

This book will, I hope, help you to answer the many questions that will be forming in your mind. Once you come to accept the basic reality of the UFO phenomenon, you inevitably must wonder about the meaning of it all. This book may not provide you with all the answers, but I hope that it will allow you to look in the right direction to find them for yourself.

3) INVESTIGATION

A great number of people claim to see a UFO every year. It would be most unlikely that,

upon making a random survey of friends or relatives, you would not find several who believe they are witnesses. The problem is that the majority of such people keep these stories to themselves - or at least within a restricted circle of trusted friends. Yet the information that they possess could prove to be of importance. Most ufologists are simply people who would fit into one or both of the basic types already considered. However, there are a growing number of those who see the value, and excitement, of collecting and investigating these UFO stories.

In many senses investigation appeals because it enables one to play detective. Most of us thrill to the escapades of the fictional sleuths of television and literature and relish the opportunity to mirror their feats in real life. One has to know how to question a witness so that he brings forth the most objective, evidential testimony. One also has to know what kinds of natural stimuli to look for in each case. Any one of many might possibly have given rise to the UFO sighting, and it can give one great satisfaction finally to prove what was seen. There are also skills involved in weighing all the factors together and solving the puzzle (often in very unexpected ways). Occasionally one has to admit defeat and accept that a genuine unknown phenomenon has been witnessed. Even then the end of the line has not been reached, because these conclusions have to be presented for others to see in a detailed report which lays out your case comprehensively and objectively.

UFO Study aims to be an invaluable aid to those who would like to try their hand at this. It will contain all the basic information required to ensure that their work is acceptable to others. You must appreciate the vital role that these collectors of information play; in just a few short years the stories that they are pursuing would have been lost forever. They are in a unique position to add further to our growing knowledge, and they must be prepared to use their opportunities to the best advantage. UFO investigation - if done well - can be exciting, ego boosting and rewarding. It is one of the most fruitful pastures of the UFO field.

4) RESEARCH

Collecting the evidence, as investigators do, is essential. Yet there also have to be people who manipulate this evidence and try to make sense out of it. These are the research workers. Now the word 'research' conjures up visions of a top scientist with unlimited financial resources slaving away in a laboratory full of test tubes, but this is not absolutely true. Anyone can do research, and there are very few scientists involved, and none with unlimited financial resources. Many of the important contributions so far have been made by ordinary people who simply had an idea and the persistence to find the available data and conduct their appraisal of it.

Their work has pointed us towards the answers, and it will be their work which, in the future, will finally fill in all the gaps. **Part Two** of **UFO Study** - *UFO Research* - provides advice for `would-be' researchers. It details the kind of things they can do, and suggestions as to how to go about doing them.

Even if you do not believe you will do more than read this book, it is certainly possible that the 'bug' will bite and you will be unable to escape the hypnotic lure of a subject which is, arguably, the greatest of all modern mysteries. Whatever your reasons or motivations I hope that you both enjoy this book and find it of assistance. Ufology needs you; from the investigator - who provides the raw data, to the thinker - who supplies the ideas, and finally to the researcher - who tries to mould the two together into an acceptable answer. Newcomers in all these areas are constantly needed.

The UFO mystery is baffling - of that there can be little doubt. Its solution is not at present obvious, but there are hopes that it may soon become so. When it does it will be because of the work of that small band of dedicated enthusiasts - the ufologists. To join the search all one needs is a reasoned, objective approach, an open mind, and the willingness to tackle the great problems of the subject.

Could you be such a person? If so - then read on.

2: What is Ufology?

"If ever a subject needed rescuing from its advocates, then ufology is the one." - Dr Ivan Grattan-Guinness

Just think for a moment what you regard as the subject matter of ufology. Forget any ideas about it being the study of spaceships, or strange aerial devices, for it is by no means certain that it is either of these. At this stage it would be wholly illogical to make any presuppositions. So - firstly, we must look at the scope of the reports themselves and see what we can deduce from this. The following brief case examples are all real events investigated by myself (Jenny Randles) and my colleague, Paul Whetnall during the late 1970's. Most people would regard them as being illustrative of the scope of the problem.

Case 1

In late May 1979 a man telephoned the local radio station, Radio Manchester, to tell of a UFO sighting made moments before. It turned out on investigation, first by Peter Warrington and then by myself, that as he was approaching Levenshulme railway station in Manchester, on board a commuter train, he had spotted some odd lights in the sky. On disembarking he watched for several moments as they moved off, flashing brilliantly with a blue/white glare. As it happens this report was almost certainly identifiable as an aircraft equipped with strobe lighting (see Chapter 9), but that is not the point. This was a UFO sighting.

Case 2

Whilst holidaying on the beautiful Mediterranean island of Ibiza in August 1978 Paul and I could not escape the universal nature of the UFO. We met, and consequently interviewed, a lady who had had a strange encounter at her lovely country villa, amidst the wooded slopes outside the town of San Antonio. Awoken at 2.30 a.m. by a penetrating throbbing noise she opened the curtains and peered out into the darkness. There she found an orange sphere of light bathing the hillside with its aura. It looked like a ball of fire, slowly moving above tree-top height, and pulsating in rhythm with the sound which was by now boring into her skull. She told us how to reproduce this effect: "Take your hands and hold them both a few inches away from your ears. Now move them right up to cover the ears. Move them away again and repeat this cycle once every second." It seems that the resulting "whoomph-whoomph" sensation is what she experienced that night. Eventually the sphere and the sound did vanish, but next morning the witness was left feeling rather ill. This is certainly a UFO sighting.

Case 3

Being engaged in poaching inevitably makes one wary of talking, but we did obtain a frightening tale from four young men who had been chasing pheasant early one evening on the banks of the River Weaver near Frodsham, Cheshire, in January 1978. Apparently they had seen a silver "balloon" float over the surface of the water and

land in the dark meadows before them. From cover, they watched as what they called 'astronauts', in silver suits with `miners' lamps' on their heads, got out and started to take undue interest in the grazing cattle. Terrified, the men watched as one paralysed cow was allegedly placed in a cage and seemingly measured by some bizarre equipment. In panic they fled, but were impeded by a force that pulled at their lower regions. An eerie blue/green glow had permeated the area, and one man later developed marks not unlike strong sunburn on his leg. Without any doubt this would classify as a significant UFO sighting claim, although some have since questioned its validity. (1)

Case 4

It was a sad fact of life for Ken Edwards - then a service engineer from Warrington, Cheshire but now sadly deceased - that his encounter should happen in March 1978, coincident with the massive publicity surrounding the feature film Close Encounters of the Third Kind. The police unwittingly released his story to the media and Ken and his wife found themselves in a crazy situation.

Silly newspaper stories such as "Ken and a flasher from outer space" (2) did not help him. (Even sillier, one might feel, than the headline one newspaper chose for the previous case: "Close Encounter of a Moo-ving kind"!) In fact, all that had happened to Ken was that he had bumped into a grotesque white figure with arms sticking out of its chest, as it meandered across the road in front of his van. It beamed white rays at his body, and apparently made him feel dizzy and lose all sense of time. When he came to his watch had stopped, his fingers were burnt and his expensive radio-transceiver had literally exploded.

Worse still, for Ken, was the way the figure had disappeared. It had walked straight through a ten-foot-high security fence into an Atomic Energy Research Centre - without, of course, leaving a hole. There was no UFO involved in this incident, and afterwards he experienced what must only be termed 'psychic' processes of several kinds. However, there were enough parallels with encounters with UFOs and entities to make it worthy of study. Even so, note the typical, but totally unjustified conclusion of the referenced newspaper item that this figure was something "from outer space". About the only thing any investigator could conclude on this case was that Ken Edwards was a sincere and frightened person. Certainly, to my mind at least, this was a UFO-orientated experience. (3)

Immediately we begin to see the vast range of cases one is called upon to deal with. Nobody has, as yet, defined limits for what is and is not ufology - although there are certainly those (myself included) who would count all four instances cited so far and add things such as dream-like or hallucinatory experiences of a UFO nature. (4) Conversely, there are those who feel that we must limit ourselves to what is called the `nuts and bolts' approach - or, "If it's real, it's a UFO." (5)

There is no broad agreement, and it really has to be left to the discretion of an individual investigator. Provided he is prepared to adopt an open mind, and not simply investigate cases that interest him because they fit a theory he might hold about UFOs, then this is fine. The greatest danger comes from taking too narrow an approach, and regardless of what they do or do not tell us about UFOs in general, it would be most unwise to disregard entirely events that appear subjective or "unreal'. Can anyone define what "real" is? If it is "real" to a witness then, perhaps, that is all that matters.

To progress, I would like to suggest a working definition of what "Ufology" should be: the study of reported experiences, and their possible causations, which the witness, investigator or both consider related to their conception of the UFO phenomenon.

This gives enough scope for anyone to define their own limits - which is important, and also takes into account the interpretations of the witness. This factor, significant as it is, is often overlooked. Most crucially, however, it does not imply the ridiculous - that ufology is the study of UFOs! It never is. If we could study one `UFO' under scientific conditions we would go a long way towards understanding the phenomenon. We are dealing with stories, not physical things. Consequently, the human manipulations of these stories - by witness and by investigator - must be a part of our study, as must all the possible causations for the experience. As you will see there are quite a few of these.

Ufology is an embryonic science, but it is not (as sometimes claimed) yet a science. This is because there is no general application of scientific technique. Far too many people allow beliefs to prejudice their thinking, and incredible situations arise. I shiver every time I recall one report conclusion from an apparently sincere investigator. Having followed through a story of an interesting metal-like disc, seen crossing the sky, he concluded - with no logical justification whatsoever (outside his own wishful thinking) - that this was "... apparently an Adamski Scoutship or inneratmospheric survey craft." One might be tempted to ask what one of those actually are - but there seems little point. All I would say is that he is seemingly very perceptive, but he is not a ufologist.

You must get it straight right away that this kind of nonsense in a report is totally unacceptable. A fair conclusion might have been, "... this report seems to be a phenomenon that appeared solid and physically real, but is not at present identifiable in known terms." Lesson number one has to be to think in this rational and unemotive way. Conclude all you can conclude, but never conclude any more.

The standards of UFO technique need immense improvement if we are to make the subject acceptable. One of the aims of this book is to help in this struggle. Inevitably

we need more specialized aid from science because many of the problems of ufology are scientific ones.

What must be remembered is that we should not limit ourselves to the sciences we think could help. Atmospheric physics certainly has a role to play, but so too do psychology and sociology. You might not fully understand why this is so, right now, but by the end of the book I hope you will. When probing into any case you will need to apply something of these sciences - and others - and be ready to call out for help when needed.

It is important to realize the things that you can do and those that you cannot. No book can teach you ufology. I certainly hope this one will assist, but unless you go out and about and practise its ideals you will be but halfway there. Of course it takes time. The first few cases that you come across will see you feeling your way and making mistakes. Everyone does. Do not be afraid to call out for help. There are times when every ufologist - no matter how experienced - needs that. Nobody can be an expert in chemistry, physics, psychology and all the other relevant fields at the same time, and each UFO sighting is different. Whilst I can help you work out methods of approach, and give you guidelines on how to handle the different facets of the phenomenon, you must be flexible and able to recognize which areas are most important. Based on this, only you can decide whether or not your experience in this specific area is enough to do that particular case justice.

No doubt we would all like to think that we can handle anything, but if the result is an incomplete study (as it often is) what purpose is served? Science will laugh at your valiant efforts and say; "This work is invalid because he did not do such and such." Working as part of a team this can be avoided.

To be sure, there is much that you can contribute and the job that can be done by all is considerable, but do not get the idea that armed with this book you can go out on the streets and become a 'top' ufologist. That all depends on rather a lot of things.

As we have seen, the range of UFO sightings are quite enormous. It would be an idea now to recognize what some figures say about these reports. These are quite consistent - whatever source one uses - official, or private. About 45% fit into the type exemplified by Case 1, at the beginning of this chapter. This is certainly the largest single batch and, as you will recall, is also the least interesting. There are cases intermediary between the first two examples, which I did not illustrate with a reference. These are really just more interesting variations on the theme of Case 1 (probably with a specific unusual shape but no interaction caused by the phenomenon). These cases would amount to about a further 40% of all sightings. Case 2 we would call a **close encounter of the first kind**, and they would total about 10%. This would leave just about 2% for a further extension of Case 2 (where verifiable after-effects are left) and a further 2% for Case 3 (which can be defined as a

close encounter of the third kind). Case 4 is an example of the most rare type of experience - the **close encounter of the fourth kind** - and only about 1% of the overall total of sightings refer to such. As you can also see, researchers use specialist language to define specific types of UFO sightings – these terms being fully explained in **Chapter 3**.

This division of the 'UFO Pie' is illustrated in **Figure 1** where a random sample of 1,003 reports is divided into the various examples (not precisely, I might add, since precision is not important in this respect). It is immediately obvious that the stranger and more interesting a case, the less common it will be in the records.

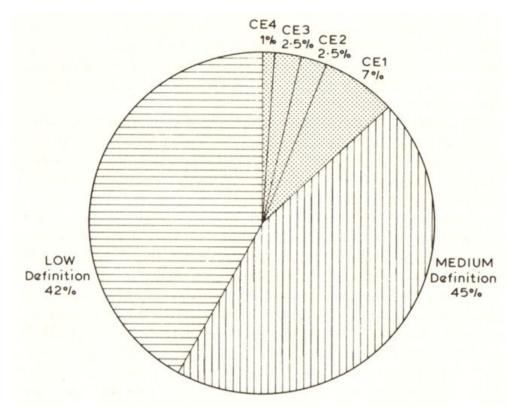


Figure 1: "UFO PIE" – distribution of case types, based on 1,003 UFOIN reports, 1975-1979. Note that Close Encounter UFO experiences are much less common.

Now there are many reasons for this, not least of which is the fact that witnesses of events such as those described in Cases 3 and 4 will be more reluctant to tell anyone about them because they may fear (with some justification) that it might precipitate suggestions about their sanity. Obviously if you are in a position of responsibility or authority then the effects of such a disclosure would be enhanced and, consequently, it is not surprising that we get less reports of any type of UFO experience from people with such a position (although they do certainly come, from time to time).

Whatever the cause of this distribution it is clear that really strange UFO encounters are reported infrequently, and for most of his time an investigator will be following up fairly low-grade sightings. This should not be taken badly, because this is how the

trade is learnt. Quite often there are plenty of facts to be checked - such as aircraft timings or weather details, and valuable experience is thus gained. Of course, even here flexibility is needed. It was no aircraft that walked through the security fence at the Atomic Energy plant!

Another figure to bear in mind is that 90% of all sightings are normally identifiable with some measure of certainty. You will see that many of the unknown 10% fall into the stranger categories (but not all, I should add). This 10% remainder I call the **TRUE UFO** and, obviously, it is really the study of this with which we are primarily concerned. Nonetheless - the other 90% have importance in their own right. They provide a back-check for one's methodology in cases where a genuine unknown is suspected. This data also provides a comparison against which the attributes of the "unknowns" can be crosschecked. If your "unknowns" truly are unknown then there should be distinct differences between this data (once you have built up enough) and those cases which are apparently explained.

Figure 2 illustrates the distribution of the various types of UFO sighting within both the `unknown' and the identified categories.

Of course this comparison of data leads to a possible research project which anyone could conduct. Already there are many thousands of reports on the files of worldwide UFO organizations, and comparison of "knowns" versus "unknowns" could be most instructive.

My own research over the years has indicated to me that much of the TRUE UFO data can be explained in terms of novel physical phenomena, or not yet understood psychological processes. Whilst, to my mind anyway, this still makes the study of UFO reports worthwhile - even were there nothing else to it - it is obviously the possibility that some of the cases represent what I call **EXOTIC UFOs** that makes most people delve into the enigma. This is fine, and I certainly do not say that there is no evidence for the existence of an EXOTIC UFO. However, one must still make the difficult but decisive step of becoming a sceptic and not prejudging the answer. It must formulate and modify itself in your mind as, with progress, it inevitably will do. I have been an active ufologist since 1968 and I am still a sceptic - but I am also still involved. From that one can assume that I accept that there is something to be found - a needle amidst the haystack.

To conclude this opening chapter I will give a brief outline of the various sections of this book. You are advised to read them in sequence, as the aim is to give you a kind of "self-instruction course" in the development of ufological skills. Nearly every chapter has a section on 'Things to do'. If you follow through with these you will naturally develop further and faster, but the book may also simply be read for its instructional or entertainment value.

Part 1 - *UFO STUDY* tackles the problems of investigating the phenomenon. It shows how we can extract data from witnesses and present it in an acceptable form. This is where you will find the kernel of the UFO nut, for it is on this data that all our interpretations of the nature of the phenomenon are based.

Part 2 - *UFO RESEARCH* includes the history and development of the modern UFO scene. The situation in Britain is described in detail and progresses to describe what we are doing and can still do to utilize the data that has been provided by the work of the previous sections.

It is a bit of a chicken and egg situation. One cannot have research without good quality data, but without research one does not know what specific kind of data is needed. The idea here is to set you thinking along the lines of what you can do yourself, regardless of your resources or limitations. It concludes with an overview of the deeper aspects of UFO study. It is not intended to be exhaustive, but will provide an introduction to modern thinking on the nature and depth of the problem.

I hope that you will find the journey exciting. Certainly if you sit back and watch the scenery for the next few chapters you can hardly fail to be stimulated by the thrill of the chase, and the chase after the unknown is one of the most provocative and potentially important trails that mankind can take.

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- 3. `Entity Encounter at Risley', Randles, J., & Whetnall, P., FSR Vol. 24 No. 2, 1978
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- 5. 'Ufology and Rationality', Morrell, Dr R., UFO Research Review, Summer 1978

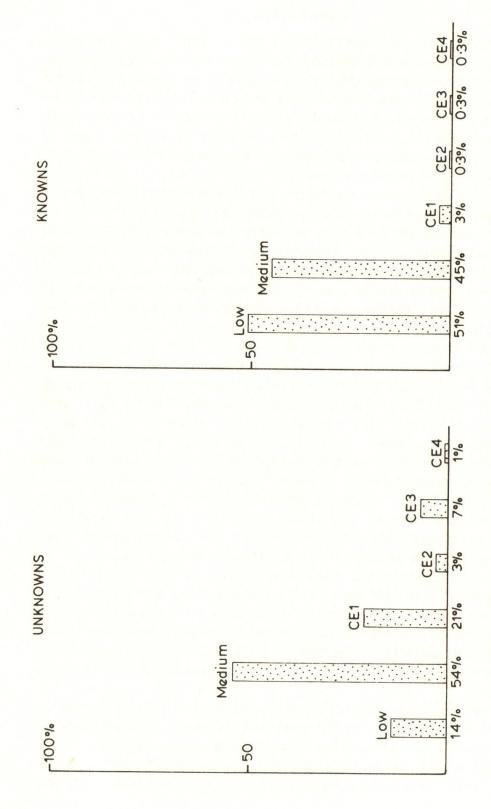


Fig. 2: Percentage distribution by UFO type of UNKNOWNS and KNOWNS (based upon NUFON data for 1978 and 1979). Note that 32% of the UNKNOWNS are close encounters, but only 4% of the KNOWNS are of this type.

3: Classifying the UFO

Scientific study presupposes data patterns and a measure of repeatability, and by and large UFO reports lend themselves to classification within their domains of strangeness. Dr J. Allen Hynek, **The UFO Experience.**

In this section we are going to look at UFO classification systems. The phenomenon is so complex and its possible attributes so wide-ranging we need to structure our arguments in some way and present evidence in a logical sequence. It is common practice within scientific study to define classes of any phenomenon under examination so that this breakdown facilitates both comprehension of the overall pattern and specialisation within its individual facets.

This methodology has been applied to the UFO phenomenon in the past. Dr. Jacques. Vallee was the first to define a workable system (1) and this was followed by Dr. J. Allen Hynek in his first important publication on the subject (2). Both systems have had some measure of support and subsequent development (3), but it is that of Hynek which has come into universal usage.

The Vallee system classifies more according to the behaviour of the phenomenon, whereas the Hynek system relies more upon the physical description as provided by witnesses. Neither is completely satisfactory but the Hynek system provides the best basis upon which to work for our purposes. His original schema proposed six categories of UFO experience:

NOCTURNAL LIGHTS (NL):

The lowest in the order of merit, relating to events of **low strangeness** (see below). They form the bulk of any collection of UFO reports, consisting mostly of nocturnal observations of a distant light source; as a consequence they are sometimes also known as **LITS**, or "light(s) in the sky".

DAYLIGHT DISCS (DD):

Generally referring to all daylight observations that do not fall into any other category. Although the term "disc" is used to define this particular class of UFO, in actuality all manner of shapes have been reported.

RADAR/VISUAL CASES (RV):

This denotes instances where a visual observation coincided with the radar tracking of an unknown object. Non-visual radar contacts are generally considered too suspect to take note of.

CLOSE ENCOUNTERS OF THE FIRST KIND (CE I):

An object observed at close quarters but one not associated with any effects or traces to otherwise indicate the presence of an unknown phenomenon.

CLOSE ENCOUNTERS OF THE SECOND KIND (CE II):

A UFO event involving an effect (and/or a trace of some form) on the witness, environment or both.

CLOSE ENCOUNTERS OF THE THIRD KIND (CE III):

An incident where animated entities are associated with sightings of UFO phenomenon.

Some researchers have subsequently added another event-type to this schema, namely **Close Encounters of the Fourth Kind** to denote so-called "alien abduction" events, although this was never an "official" part of the Hynek system.

The basis for this system is an excellent one, but it has some several failings, most notably in two specific areas. Firstly, it can often be very hard to determine which category a case fits into, especially in regard to Daylight Disc, CE I and CE II type reports. Secondly, while an arbitrary distance "boundary" may well be set to differentiate between close encounter and non-close encounter case (e.g. 100-500 metres), it is generally accepted that witness estimates of distance are often notably inaccurate.

Hence, despite the popularity of the Hynek system (particularly since the 1977 feature film *Close Encounters of the Third Kind* which resulted in it acquiring almost legendary status), the following classification schema was proposed in the late 1970's to address the above concerns. It is sometimes termed the **Randles/Warrington system** after its originators Jenny Randles and Paul Warrington) (4). For convenience, we have exclusively used this particular system in discussions of the "UFO experience" throughout this work:

LOW DEFINITION (LOW):

Reports where the definition is poor, and only brightness, colour and motions are discernible with any degree of certainty. This takes account of all the Hynek "Nocturnal lights" along with some poorly defined daylight cases also (regardless of closeness of approach).

MEDIUM DEFINITION (MED):

Any report where the object has a definite physical substance to it, so far as the testimony of the witness is concerned. This normally means the addition of a clearly defined shape. Again proximity of the object is unimportant if there is no interaction, either with witness or environment.

INSTRUMENTALLY DETECTED (INST;/P, Photo, /R. Radar):

The category that supposedly provides 'hard' evidence, in the form of radar tracking, photographic images or any other observation by means of an instrument that can permanently record the phenomenon.

CLOSE ENCOUNTERS OF THE FIRST KIND (CE I):

Encounters with transient effects.

CLOSE ENCOUNTERS OF THE SECOND KIND (CE II):

Encounters with semi-permanent effects

CEII's comprise close encounters (under the same definition as above), but with the addition that the effects produced last for at least some time after the phenomenon is over. These must also be seen and attested to by persons not direct witnesses to the UFO phenomenon itself. This may or may not include the investigators. Examples here are cases where there are physical traces left on the ground

or vegetation growth is affected at alleged UFO landing sites, and where a witness undergoes long lasting physical or psychological change following an encounter.

CLOSE ENCOUNTERS OF THE THIRD KIND (CE III):

A. Entity Cases

All encounters where an entity is seen which appears to have some association with the UFO phenomenon (either obvious or implied). A UFO may or may not be seen at the time of encounter. Entities may be on the ground, in the air or in the object itself and may he performing various activities, provided no form of contact between witness and entity takes place.

B. Contact Cases

A similar definition as in the CE III, except that contact between witness and entity is alleged to occur. This may involve no more than gesture or verbal communication, but may extend to claims of actually boarding the UFO provided none of the factors relevant to the CE IV are reported.

CLOSE ENCOUNTERS OF THE FORTH KIND (CE IV):

Encounters with psychic effects

Under the Randles/Warrington system a case is only defined as a "close encounter" if it involves an interaction between the phenomenon and the witness, environment or both. It also highlights cases where effects of a "psychic" nature are reported (here defined as an experience whose context involves an apparent distortion of consensus reality). Such claims are often associated with abductions, which often feature "time-lapses" and other perceptual anomalies. Hence, the investigator concerned must carefully ponder whether a claimed entity encounter is best defined as a CE III or CE IV event.

In any event, the differences between this system and the one originally defined by Hynek provide a good illustration of how our theoretical understanding of the UFO phenomenon has increased over recent years.

To conclude - classification systems (such as those detailed above) represent an important aspect of the subject that students of the UFO mystery will gain considerable benefit in understanding. They lie at the nexus of both UFO investigation and research and provide the basic intellectual framework to define the UFO experience in a compact but (nonetheless easily comprehendible) form.

REFERENCES:

- 1. Challenge to Science: Vallee, J. and J. Neville Spearman, 1967.
- 2. The UFO Experience, Hynek, J.A., Corgi, UK, 1972.
- 3. An updated version of Vallee's system is featured in Confrontations Vallee, J. Souvenir Press Ltd, 1990.
- 4. UFOs: A British Viewpoint Randles, J. and Warrington, P. Robert Hale, 1979.

4: The UFO Case Report.

Most investigators will need only a little effort to turn their present reports into competent professional contributions. However, it is an absolutely vital skill to acquire, since all of the foregoing work of an investigator is based upon it -Guidelines on the Content and Organization of Reports by John Hind and Martin Keatman (1977).

When your investigation is concluded it remains for you to compile a report on it for posterity. Such a report should have several aims. Firstly, it must describe what occurred, where and to whom, in as much detail as possible. It should also be in a logically sequential format. Secondly, it must describe what you did as an investigator to try to identify the source of the account, or certainly to rule out the major possibilities. Thirdly, your report should contrast all these feasible possibilities, giving value judgements about the likelihood or otherwise of each one being responsible for a particular case. The final section of any report should consist of your recommendations - either for further work that might profitably be done by experts in various fields, or for overcoming any difficulties in investigation methodology which you encountered en route.

If your report fulfils these objectives, particularly if presented in well laid out sections, then you will have gone a long way towards achieving what you set out to do when you first heard news of the particular UFO account in question. Naturally, everyone will have his or her own individual style and it is not essential that the presentation of a report should be totally standardized. It will be much easier to read if word-processed (and it copies better), but if it must be handwritten then printing, despite the extra time involved, is vital. An A4 page size is adopted as standard for report writing. The following ideas are based upon suggestions made to investigators by the UFOIN team in Britain by John Hind and Martin Keatman during the late 1970's. (1)

Each report should possess a title page, which will be used simply to convey the file number, report title, investigator's name or group's name, date of completion of the report and any codified information about the case that will transfer rapid data. This will include the classification systems suggested in Chapter 3, with the addition of code letters to denote special effects. A list of those devised by Jenny Randles and researcher Bernard Delair for a joint research catalogue is given for your consideration:

(L): Landing
 AN: Animal Disturbance
 TR.: Physical Traces
 Electromagnetic Interference
 Physic: Physiological Effects
 Psycho: Psychological Disturbance

On this basis the case cited in Chapter 1, involving poachers and immobilized cows would be codified as: CE1 (L) AN, Physic, Psycho. That is to say, a landing

involving entities, but no contact, with animal disturbance, physiological effects on the witnesses and subsequent psychological disturbance (2).

While the above provides a means to define the general nature of UFO events, they fail to provide a guide as to a case's apparent reliability or its relative strangeness. This issue was recognised by Hynek during the early 1970's. (3) His **Strangeness/Probability** system (often known by the abbreviation "**S/P**") rates these two particular aspects on a numerical scale of 1 to 9. Under this schema, a Strangeness rating of "0" represents a report with no strange aspects, while the same rating in regard to Probably indicates an event totally lacking credibility. On the other hand, a Strangeness rating of 9 represents a case possessing no mundane aspects, whereas a Probably rating of 9 indicates an event which was completely credible. Both extremes should be regarded as unobtainable in reality; hence the S/P rating of the vast majority of sightings fall somewhere between these two extremes.

For example, an investigator might state that a report has a strangeness rating of 6 and a probability (credibility) of 4 - this event therefore having an S-P rating of 6-4. In the original system the determination of these rating are arbitrary; each point of a strangeness rating being allotted for each notable anomalous action associated with the reported UFO (i.e. mode of flight, effects on the environment and/or the witness, etc.) Furthermore, Dr. Hynek rarely assigned a probability any higher than 3 for a single witness account, while he allotted a base probability of 5 for multiple witness events involving observers of good character. Increases to this latter base total should represent high observer quality (i.e. witnesses who are pilots or policemen), while a decreased rating indicates a lower than normal credibility.

Another feature, which should be added on this title page, is the report's **Investigation Level**; a single-letter code indicating the extent to which a case was documented. The **Investigation Level classification scale** is cited below:

Level A:

A report which has received on-site investigation by experienced investigators, who also physically met the witnesses and discussed the case with them in person.

Level "@":

A report that has received an on-site investigation by experienced investigators, but where any interviews have been conducted via teleconferencing or similar means. This obviously represents a less-than-ideal situation - always aim for a standard **Level A** investigation wherever possible!

Level "B" and "#":

An interview with the witness or witnesses was conducted by investigators but with no follow-through investigation into the case. Cases where the investigator and the witness(es) discussed the case only via teleconferencing or similar means should be denoted with the use of a hash symbol ("#").

Level C:

The witness has simply completed a standard UFO report form of some type, (including detailed Internet "web-forms"). No interview has been conducted.

Level D:

The report consists solely of written communication (letters, email and completed rudimentary Internet web-forms etc) from the witness(es).

Level E:

The report is based on information received second hand (such as a newspaper account). There has been no follow up investigation at all.

It is the writers' opinion that only inexplicable reports receiving a Level A or B investigation should be deemed as candidates for TRUE UFO status; although some lower strangeness events with comparatively minor information quotients - such as Low Definition reports - could be acceptable at Level C, although this in itself represents a far-from-ideal minimum standard. Nevertheless, **all** "High Strangeness" events should, without exception, be investigated to Level "A". Ratings lower than "C" should be deemed as equating to "insufficient data" and efforts should be made (if possible) to raise the information quotient of such cases.

Following the title page, or perhaps on it, there should be a brief abstract of the contents of the report. This means just a few sentences to augment the classification coding. This describes what the report contains with specific reference to any of the effects that might have occurred. In this way a researcher can look through a whole batch of reports quite quickly (there could be hundreds on file). If he is specifically interested in effects of UFOs on dogs he will first pick out all the cases coded **An** on the front, and then select those directly relevant from the note, which should be in the abstract, relating the animal effects to a dog. He may then wish to compare his two sets of data - seeing, for example, any differences in effects on dogs and, perhaps, on cats.

In combination with the above, you may wish to follow the convention of many scientific papers and also include **keywords** on the first page— these being a series of single words describing the most significant elements of a case. For example, a case involving a policeman observing a bowl-shaped UFO associated with missing time and radio interference could be represented as follows:

{Case Abstract}

Keywords: Policeman, bowl-shaped UFO, radio interference, missing time.

Below this should be a table of contents, written as if the report were a book and you were describing numbered chapter headings. Each section and sub-section should be numbered A (1), A (2) etc., or 1 (i), 1 (ii) and soon.

The main bulk of the report should follow next, divided into the sections and sub-

sections as given immediately before. Examples of a logical sequence of the main portions would be:

- Chronology of investigation.
- Chronology of events in the account.
- Witness details.
- Geological, geographical (and possibly historical/folkloric) data relevant to sighting locus.
- Conclusion.
- References.
- Appendices.

The case conclusions, as suggested previously, should have a strict emphasis on objectivity. You have seen some of the rather wild claims that some reports have made about sightings, as I have deliberately quoted them. As the UFOIN proposals put it: it should be noted, though, that an over-credulous or unsupported conclusion creates a bad impression. The best conclusions are couched in terms of probabilities.

Your recommendations follow on naturally as the next stage, but these do not close the report. You might find it odd that most of the factual data (letters from airports or weather centres, maps, site photographs and the like) all go at the back of the report in the **appendices** section. This is the customary manner of compiling scientific reports, and that is after all what we are endeavouring to achieve.

No doubt you will now appreciate that a thorough report may turn out to be somewhat bulky. Of course size varies according to the merits of individual cases, and CE3 and CE4 experiences inevitably require more data since knowledge about the percipients is usually required in great depth. It is common, for example, for some reports on high strangeness incidents to run to about thirty A4 pages, and several are more than a hundred pages. This is not needless bureaucracy or pen-pushing, but the production of important scientific data.

John Hind summarized the point well: Report writing is a skill that takes practice and effort to acquire and time and patience to carry out, but it is a skill that is absolutely essential to the effective UFO investigator. I can but endorse these remarks as, no matter how well you investigate a case, all your work will come to more or less nothing if you do not preserve it by means of a first-class written report.

References

- 1. "Guidelines on the Content and Organization of Reports", Hind, J. & Keatman, M., UFOIN Guidebook, 1979
- 2. 'Publishing of UFO Data', Randles, J., FSR Vol. 24 No. 2, 1978
- 3. The UFO Experience, Hynek, J.A., Corgi, UK, 1972, pp 41-45

Things to do:

1. Visit your nearest major reference library and examine some serious scientific journals. Even if you cannot understand the content you will appreciate the format of typical scientific report writing.

5: The Source of UFO Reports

"I do not wish to be involved any further ... References in any film, book, magazine etc., concerning my experience must be completely anonymous. If references are made I will take legal proceedings against you ... I am sorry, but that is how I feel." - Statement by the witness in a late 1970's UFOIN investigation.

It might seem like a silly question, but how would you go about finding UFO stories to pursue - for whatever purpose you wish to pursue them? The answer is not so simple. There is a rather amazing sociological reaction that pervades the whole mystery and some would have it, not without due cause, that the study of this is more interesting than the search for any physical stimuli that may act as triggers for it. This reaction has many effects, but one is that it leads to most witnesses shuttering their minds to the truth. They rarely tell anyone about what they have experienced, especially if it is really strange, and when they do it is usually just very close friends (see quotation above).

The reasons for this can be clearly seen in an excellent article by researcher Harry Tokarz, where he discusses the various, and often nasty, side-effects which a UFO encounter can have on the life of an individual. As he puts it: "What the majority of percipients dreaded since the day they made that fateful report was the `depraved' public reaction. Since their report they seemed to inherit a wide variety of new difficulties. The emotional impact is tremendous and the UFO incident becomes secondary in this new chain of events." (1)

Tokarz gives numerous examples of harassment leading to people being hounded out of jobs, even run out of town, and ultimately having their lives threatened or witch-like effigies of themselves burnt in the street. Incredible ... unbelievable ... and yet true. It is irrelevant what the social status of a witness is before an encounter. Indeed, in some senses it is true to say that the higher up society's ladder one is, the further there is to fall. As you have seen so far, businessmen, military servicemen, policemen and ordinary working men and women are all potential victims alike. There is nobody who could be said to be a typical UFO witness.

Inevitably this leads to great difficulties for the ufologist, because the more conscious the public become of these facts the less hope there is that they will be prepared to come forward. Of course there are people who will brave the ridicule and all else that follows - perhaps because they thrive on the publicity (and indeed their stories might be untrue in the first place as a means to this end). However, others will still be unaware of what lies ahead and will just wish to tell what happened.

Take the example of Ken Edwards and his meeting with the weird being on a Cheshire roadway (see **Chapter 2**). In this case it was the police who misread the

situation by releasing the story to the local newspaper — the *Warrington Guardian*. Ken had given permission for this on the understanding it would go no further, since the police had pointed out that the local Press were always anxious for human-interest stories they came across. Unfortunately, UFOs were an "in" subject at that time and, presumably, sensing a big story on their doorstep the local newspaper released it to the wire services. There then followed numerous reporters from national papers, unleashing the usual pantomime of visitors on poor Ken.

First came every ufologist within travelling distance of Warrington, descending upon the Edwards household as if it had suddenly become Mecca. Next semi-religious societies started to send literature through the post, and eventually interested sightseers came to view the spectacle (in one case what almost amounted to a religious ceremony took place on their doorstep!). By the end of a week Ken had been variously informed, as pleasantly as possible, that he was "insane", "a liar" or "chosen by God". So far as he was concerned he was none of these. But all he had done was see a strange thing late one night.

Ufologists need to be prepared to cope with this situation. It would be sensible to pause here for a moment and consider the role of anyone who sets out to investigate a report of a UFO phenomenon. As I see it there are four aspects to this. The first is, of course, pure curiosity - an interest in what was seen and why. Both questions have relevance since, as you have seen, the great majority of things reported as UFOs are really explainable. People do not normally mistake an aircraft or a star for a strange aerial visitor and so it becomes fascinating to discover why observers, often well-trained or experienced, are misled.

Whilst this human detective story usually leads to disappointment (if one is hopeful of discovering new revelations about the universe), the tantalizing possibility always remains that you *will* come up with a classic case that will add important new data to our conception of the enigma. This is the spur - the dazzling jewel that dangles in front and leads one onwards through the sometimes frustrating chase after witnesses and their stories.

Most of the time, however, one is engaged in the third aspect of one's job - simply recording information for posterity. Whether an investigation proves negative or not, the careful compilation of the work one has done remains essential in order to add the information to the ever-growing files. Some day another investigator might come up with a similar case and it will be vital for him to know precisely how you handled yours. Comparison of the two cases may even, one day, solve a part of the whole mystery.

Yet in many respects it is the final aspect of the job which is the most important. It is that of a counsellor, or even as John Brent Musgrave puts it, a healer. He summarizes his point as follows: "Attention has focused on the UFO percipient as a source of

information. But at the field investigator level little attention has been paid to the UFO percipient as a person who has experienced something that potentially is the most traumatic and/or "meaningful' experience of [his] life. (2)

We have seen already how the balance of people's lives can be upset by a UFO encounter and its aftermath. Another example of the task that sometimes befalls a ufologist will suffice. In October 1978 there was quite an international stir when a private pilot, Frederick Valentich, disappeared off the coast between Australia and Tasmania minutes after reporting by radio a close encounter with a UFO. Neither wreckage of his Cessna aircraft, nor trace of Valentich, was ever found. (3) It was never proven that the disappearance had any connection with the alleged UFO encounter, and there were various theories about his inexperience at night flying and even one that claimed he had deliberately engineered the sighting to aid in a plot of his to vanish for personal reasons. Nevertheless, it presented as an implied UFO abduction by the world's Press and its effects came to be felt far more widely.

One evening, about a week after the news of the disappearance, a frightened young woman appeared on my doorstep. After at first making sheepish excuses about looking for a neighbour, she broke down and asked if I was "the UFO lady". It was not unknown in the area that I had such an interest, and so finding me was no difficult task. After a period of an hour or more of gentle coercion she was persuaded to tell her story. Apparently she had bottled this up for more than two years. Finally, she simply had to tell somebody, the trigger being the Valentich story and a deep foreboding that she too might be abducted.

Her story was a simple one of how she, her husband and daughter had all had a close-up sight of a huge grey disc with windows, that had taken off from a landed position behind their home. (4) The details came out amidst obvious and deep-rooted emotions, which had led to traumatic nightmares about "space" and irrational fears about the reason for the sighting. The most important job that confronted me over the next few days was not to elicit the facts of the observation (although I did this as best I could under the circumstances), but to set her mind at rest that she was by no means alone in what she had seen. It was also necessary to convince her that she had not been singled out for any contact and that the likelihood of her seeing anything else was remote in the extreme. Slowly she regained her self-confidence and the change in her outlook when we met by chance in a supermarket some months later reinforced my conviction that the ufologist has a vital role to play within society.

Naturally, there are times when it becomes beyond one's means to handle the psychological problems that may face a witness. It is pleasing to see psychologists and psychiatrists taking an interest in the subject and working closely with witnesses who have been deeply affected. (5) A UFO investigator has to know when to call in outside help, and must try to build up contacts with qualified people who might help in the instances (fortunately rare) where such help is needed. Most of the forward-

looking UFO investigation teams are aware of this and have facilities to cope if you, as an investigator, step into deep water with a witness. Do turn to them, because remember that your prime concern must be the welfare of the witness. Always act in their interest. This may mean shying away from publicity or keeping names and addresses confidential. It may even mean, in extreme cases, keeping personal details on a separate file for the eyes of trusted experts only. In any event, you may need to be aware of the Data Protection Act (and heed its strictures) when maintaining personal records on a computer, or when disseminating such personal details under **any** circumstances. (6)

Perhaps if we started to realize that our position is often a last resort for many witnesses, and offered them positive help to overcome the problems that the encounter has created, we might find the public in general becoming kinder to ufologists and that those who have had the stranger experiences will gain confidence to tell us about them. The consequences of keeping these within themselves could be devastating, with goodness knows what degree of destructive influence on their personality and lifestyle.

Consequently a UFO investigator has to be aware of the possibility that he will be called upon to be all of these things: interviewer, detective, researcher, writer, counsellor, healer ... and probably more. If you think that UFO investigation is just about chasing spaceships and collecting evidence that the earth is being invaded - forget it!

As demonstrated by the way in which the lady in my old hometown found me, this (i.e. your home town) is obviously the place to start. It is unlikely that you will have more than a handful of colleagues actively involved, even in a big city. You have to put it across to the local community who you are and what you are attempting to do. Never pretend more than you know. For example, do not proclaim that you are searching for evidence of "alien life"; just inform them that you are collecting accounts of anomalous aerial phenomena.

Otherwise witnesses who either disbelieve in `aliens' or, quite probably, do not wish to think about the possibility due to its potential effect on their psyche, might not contact you. You must make a concerted effort to attract all kinds of UFO experience, and you will only do this by not adhering to any one theory. If you do then your sample will be biased, and any conclusions reached that are based upon it will be highly dubious.

There are several ways of appealing to your local community. The easiest is to offer to lecture to various societies (such as youth clubs, women's institutes, astronomical societies etc..). Do not be daunted by the fact that you have never given a lecture in your life. UFOs are such an intrinsically interesting subject that with just a sensible degree of preparation your talk can be most rewarding.

It goes without saying that your talk must be well researched (and a good start would be to read some of the works recommended at the back of this book). It must also be generalized and not theoretical, and fairly short - about thirty minutes, then you can afford to run over a little and still leave time for the inevitable questions such a lecture will generate. This will also be the time to open people's minds towards coming forward with any personal sightings they might have had. The most important thing is not to propound your beliefs -just facts, and possibly speculation from those who have been involved in the subject for many years.

There are numerous societies who will probably be only too glad of your services, and it should not take much of a search (via the Internet and/or your local library) to find likely candidates. You will hope, of course, that the few who will attend will tell their friends and if one of these has a sighting in the months to come you will be remembered and traced. As an aid towards being remembered use some visual material. If you have a camera and/or appropriate computer software create some images depicting UFO photographs or significant research. It should present little problem to obtain permission from any magazines involved - provided you make clear the limited use to which you are putting them. Alternatively, you can make your own visuals - for example, large-scale re-enactments of encounters.

Local libraries can have other uses. It is possible that they will allow you to place a little card on their notice board so that people who might need help will know who to contact. Or, if you have sufficient funds, you might invest in a few hundred printed sheets with a little basic information about UFOs and written so that they can be quickly digested but inspire confidence in your rationality and objectivity. Again, a library may display a stock of these - but of course you must ask first. Another method - involving a fairly small outlay of funds - has proven its worth. This is to put a display card into a shop window (any shop which has a good number of customers and accepts such cards; see **Figure 3**). Where these have been used their effectiveness is undeniable. Lastly, you can approach various individuals who host British UFO-themed Internet websites to include your contact details on their "links" pages – or even go to the expense of building and uploading your own! The latter strategy is particularly effective when combined with the other previously cited approaches.

You may wish to consider "personal firewall" measures to avoid unwanted intrusions into your privacy, especially if you have children or older family members. This can be achieved in a number of ways; for example, by omitting address details and citing only your email address and/or a dedicated mobile phone with a contact time (i.e. "available from 6 - 11pm") on your contact literature. You may even wish to go to the expense of using a call redirection service and/or a dedicated P.O Box.

You might feel that the obvious first step in attracting reports has been omitted; that is to contact the local media. However, whilst the media is a vital source of UFO data it would be most unwise for you, as an inexperienced ufologist, to confront a highly

experienced journalist. There is little doubt who will get what he wants and who may well end up looking silly. This is the last thing that you, or ufology, needs. It is probably best to avoid the media like the plague, until you have been around a couple of years and feel confident that you could master such a confrontation.

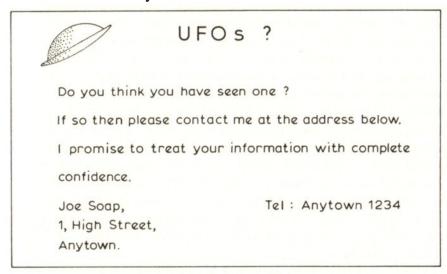


Figure 3: A typical shop window display card for investigators.

I will cite three examples of media intervention, because it is vital that you bear in mind that it is not just your own credibility that is at stake, but also that of the subject.

In March 1979 there was an interesting sighting near the town of Hertford. Three women in a car had a close encounter with a low-level, spherical object that interfered with the electrical systems and caused them all to become ill. The local paper covered the story and interviewed a relatively inexperienced nearby investigator. He was quoted as saying that the UFO emitted smoke to "camouflage itself" and that it had an electrostatic field around it that had caused the women to feel ill. Two male passengers in the car were also "invented" for the purposes of the Press, and when questioned about this he later said that it was for "reasons of security" (?).

I am making no attempt to belittle this particular investigator. He obviously acted in good faith - but it is clear how silly such unjustified theorizing sounds when presented to the world by a medium which, by its very nature, loves to bring out the most sensational aspects of any story.

This situation is not confined to inexperienced investigators. Words can be twisted and placed out of context even when spoken by a seasoned ufologist, and there is always the chance of being placed on the spot and expected to comment on something of which one is ignorant. For example, an investigator with twenty years' experience behind him, and editor of a respected British UFO group magazine, was quoted in several places early in 1979 as saying that a slow-moving cigar-shaped UFO with windows was probably the planet Venus. Venus had been prominent a few weeks before and so this hasty evaluation was not without foundation. However, when

compared with the actual details of the witnesses' consistent stories this explanation was sheer nonsense, and the witnesses were quick to say so. A more plausible explanation did appear later when it was found that a Russian space satellite had reentered our atmosphere that evening. In the turn of events, therefore, this remark did little credit to ufology. I point no fingers here, for even I have suffered this baptism by fire and I have the recording of my first radio interview as a ufologist (during which I said some ridiculous things) constantly to remind me of the dangers.

That the Press can so totally misconstrue the details of a sighting was brought home to me with a vengeance in the following manner. In March 1978 I was contacted by a freelance writer for the Daily Mirror newspaper. He was interested in the case that involved four terrified poachers and entities that placed a cow in a cage (see page 10). The investigation was at a virtual standstill and Paul Whetnall had, at that point, uncovered almost no detail. All I was able to supply for the journalist was a copy of a very brief preview of the case in the magazine Northern UFO News. The relevant section is quoted below. Beneath that is part of the version as it appeared a few days later in the Daily Mirror. As can be seen, there are minor changes in emphasis (e.g. the genesis of the "cage" into a "bird-cage"). However, take careful notice of the final quotation in the trio. That was culled entirely from what you have seen so far - plus apparent fantasizing by the newspapermen involved.

Nobody further spoke to Paul or me, and no other investigators were able even to approach the case due to the witness reactions. The witnesses remained anonymous, and as of the date of publication of the final newspaper item nothing had appeared on the case in print anywhere. The final quotation comes from the leading Canadian newspaper, the Toronto Sun, six months after the Daily Mirror piece. Its incredible variation from the true facts of the case, outlined in chapter 1, tells its own story.

Northern UFO News"... a claim by poachers in Frodsham, Cheshire ... by Devil's Garden on the banks of the River Weaver they spotted a strange balloon shaped object in the undergrowth. It had flashing lights on it. From out of this craft came three figures in 'spacesuits'. They looked around the area and discovered a field of cows. Returning to the UFO they came out with a cage-like piece of equipment and proceeded to take measurements on the cows ..." (7)

Daily Mirror

"The incredible alien cattle measurers of Frodsham, Cheshire ... three men (?)* saw a flying saucer land in a field (?) ... three entities emerged carrying a device resembling a bird-cage (?) ..." (8)

Toronto Sun

"Oldham, England (??) ... British UFO experts believe that alien beings from another planet are studying British cows (??) ... The UFO experts say three men (?) saw a flying saucer land in a field outside this northwest Lancashire town (??). Four

strange beings (??) with long ears (??) emerged from the saucer carrying a device which resembled a bird-cage (?) ... said Jennie Randles etc." (8)

* (?) indicates mistake made by the Daily Mirror, (??) indicates mistake made by the Toronto Sun.

If course there are times when it is necessary to contact the Press - and do not get me wrong. I realize that there are many honest and very helpful journalists about. They will give you leads on stories and will let you work on them at your own pace in return for news that you might turn up at a future date. In fact, the story that led to the fiasco just cited was only investigated due to the great help of Sue McTurk, a reporter on the local Runcorn Weekly News. No doubt you will appreciate that the comments expressed about newspapers apply with perhaps greater force when dealing with radio and television. Both are important influences on public opinion.

If you decide to embark upon this exciting pastime, please remember that you will be acting for Ufology - a serious and valuable subject that is fighting for recognition. It is most important that you cultivate and learn to utilize the following qualities: curiosity, motivation for truth, objectivity, perseverance, tact, and a concern for the welfare of others. Above all, however, there is a great need for integrity - honesty about oneself and what one does and does not know.

References:

- 1. "UFO Witnesses Public Property?" Tokarz, H., MUFOB No. 11, Summer 1978
- 2. "The UFO Investigator as Counsellor and Healer", Musgrave, J.B. Paper presented at the CUFOS Conference in Chicago, April 1976. Reprinted in FSR Vol. 22 No. 5, 1976
- 3. "The Missing Cessna and the UFO", Chalker, W.C., FSR Vol. 24 No. 5, 1979
- 4. Original UFOIN case file 7610, investigated by the author.
- 5. See various studies in FSR of contactees Betty Hill and Stella Lansing.
- 6. For more information on the Data Protection Act see http://www.legislation.org.uk/ and http://www.opsi.gov.uk/Acts/acts1998/19980029.htm
- 7. Northern UFO News, Number 46, March 1978
- 8. Daily Mirror, 29 March 1978
- 9. Toronto Sun, 20 September 1978

Things to do:

- 1. Design a one-page handout that would be suitable to place in your local library and would inspire people to confide their sightings in you.
- 2. Collect together several newspaper versions of the next widely reported UFO account from your own country. Look for the similarities and the differences. What specific angles of the story are they stressing? Which angles would you consider most important from a ufological viewpoint?
- 3. Write a lecture designed to last thirty minutes (even if you never intend giving it). Cover the subject in general its history its current theories. Read at least two of the recommended books from the bibliography before commencing.

6: Basic Investigation

"This is quite possibly a genuine sighting of a "carrier ship" discharging a "scout ship" or "controlled sensor". Witness was very sincere but the sighting details are insufficient as proof of the object's origin." - Part of an investigation report by a now defunct UFO group

"This "all-embracing approach" is, in effect, an attempt to link ufology with psychic research and its side-kick parapsychology. This old/new approach is, I suggest, not only dangerous as it leads very quickly up the road to making ufology a form of cult, but is also positively harmful in that both psychic research, so called, and parapsychology are unscientific." (1)

In these emotive words Dr Robert Morrell made a plea for what he terms "rationality" in UFO research. One can see very clearly what he thinks about psychic research, but it is not particularly important what any one person thinks of it. The truth is that witnesses to UFO close encounters frequently experience things that can only be placed in the context of psychic phenomena. Examples are intuitive or precognitive feelings about what they see, telepathic messages from alleged space entities and numerous associative factors which are common to ghost hunters and the like. In the face of this I find it difficult to see how one can fail to adopt an "all-embracing approach" without sacrificing objectivity. It would be highly unscientific, in the manner Dr Morrell suggested, to disregard data just because we personally do not like it. Associative psychic effects are, come what may, an undeniable part of the UFO phenomenon. That remains true however valid or invalid psychic phenomena may be, and really that is not the point at all.

Consequently, I shall be advising you to be prepared to consider anything that seems relevant, provided it is covered by my definition on page 4 Only by a broad-minded approach can one be a true ufologist. However, this does not mean that one should be gullible. A good motto would be, "Look at everything, but believe nothing." The group involved in the case quoted from at the head of this chapter were not objective. Whilst admitting insufficient data they still evaluate the sighting in the very narrow terms that their apparent beliefs allow. Of course they may well have been right, but there is no justification for believing so.

Dr Morrell does make several excellent points in his article, and it is very apparent that the need for standardized terminology and definitions - for which he calls - is a crucial one. This applies to the question of classifying UFO reports - for it is here that the investigation is first structured and planned.

Let us try to propose some acceptable ground rules that you can work towards, hopefully enabling a rapid decision on the potential value of any phenomenon.

For a start what you hear is an **ACCOUNT** from a witness, who is describing to you a **SIGHTING** he has made of an **EVENT**. Each of these terms is different, and you must appreciate why.

The **EVENT** represents the initial stimulus - which could be anything from a swarm of insects to an unusually quiet aircraft or a genuine unknown phenomenon. How a witness will perceive this will depend upon many things. It depends upon his experience as an observer. Has he, for example, ever seen a very bright fireball meteor? If the answer to this is no, it is quite possible that he could regard one as a UFO. Another important factor is his degree of attention to the phenomenon. Did he watch it intently or just casually? He may perhaps have been distracted, if he was driving on a busy road for example. This degree of attention affects the interpretation of what is seen. Again, the background personality of a witness is important. Did he believe strongly in UFOs before the experience? Had he ever seen one before? The mind, if opened to the existence of UFOs, will be much more ready to read a UFO context into any slightly puzzling event.

Clearly you can see that because of this there are numerous factors that determine how a person `sees' an event. His **SIGHTING** will depend upon all of them, and it does not follow at all that the reported sighting of even a most bizarre phenomenon is based on an equally bizarre event. This is true whatever the standing of the witness or his basic honesty. We are all human beings and therefore subject to the complexities of interaction between the eyes, other sense organs and the brain. (2)

The important lesson from this is to remember to ask background questions to determine the predisposition of the witness to UFO phenomena, his feelings and degree of attention during the experience, and his ability to recognize natural phenomena. It will be simple enough for you to decide which questions are relevant to any particular case. There will obviously be circumstances where it is ridiculous even to consider certain explanations for a **SIGHTING**. However, in all instances there must be some of this subtle search for the less tangible and emotive circumstances surrounding the witness. This must be so, regardless of how insignificant such things might appear to you, or the witness, at the time.

There are further deviations between the **SIGHTING** of a phenomenon and the **ACCOUNT** given to you. Principal ones here concern who the witness has discussed the sighting with since it occurred, and the reaction received. Also the length of time between sighting and account must be ascertained.

The memory does not record details perfectly, although interesting experiments are being conducted utilizing hypnosis in an attempt to retrieve fragments of memory that lie in the minds of witnesses to accidents or crimes. Even so, the mind does not like gaps or blank spaces and, without the witness being consciously aware of it, there will be a tendency to round these out and put in pseudo-details that the mind thinks will

logically fit. Naturally, as time goes by this process will be enhanced, and although it is true that witnesses frequently say, and mean, "this is an experience I will never forget", the question of time-lag between sighting and account is crucial.

Consequently, it is most important to speak to a witness as soon as possible. If you are not able to conduct a full investigation immediately, then ask him to write out his story, as completely as he can, and also to draw what he saw. This he can keep for you until you are able to see him. Alternatively, a witness may prefer to use his voice-recorder to make a verbal description of the sighting (some witnesses can verbalize more easily than they can write, and the witness must always have the choice of the method that best suits him).

Of course, if there is more than one witness this should be done by each of them separately and alone. The amount of discussion that occurs between witnesses during the period from sighting to account will be decisive, and you need to ask about it. Witnesses will tend to arrive at a mutual consensus story by such discussion, even if at first there was considerable difference between each version. Probably they will not be aware of this happening.

It is unfortunate that most witnesses do not have the presence of mind to record a version of their sighting within minutes or hours of its occurrence. This is a pity, and if it is at all possible for you to get them to do so within twenty-four or forty-eight hours - then do it. Any sighting that is several days or weeks old when an account is given to you is bound to suffer from deviations from the truth, and you must always recognize this. Of course it does not mean that the account is useless - but if a sighting is only marginally unusual you must face the prospect that its usefulness is considerably reduced. A truly extraordinary sighting is unlikely to adapt itself so much prior to the account that it totally alters in character, except perhaps with one or two factors. The problem with lower strangeness sightings is that there are usually only one or two factors which are unusual. Potential alteration in these makes the value of the whole case doubtful.

Naturally enough if a witness talks to either a UFO enthusiast or a total sceptic the opinions expressed on the case could quite easily find their way into the account. Try to find out all you can about who a witness discussed his sighting with.

There is another link in the chain, but we shall consider that in the next chapter. Usually the version of a sighting released to the world is the one that emerges from the witness/investigator discussions. This **UFO REPORT** thus takes on characteristics of the investigator, including his beliefs and his methods of investigation.

Another reason why speed is of the essence will be seen when we come to **Chapter 9**. When searching for potential explanations to an event it is often impossible to get

positive answers unless one follows up the relevant channels within a few days. After this an evaluation becomes one of "maybes", and depends upon a subjective interpretation of the facts by yourself or others. Clearly in such instances no event can be proven to be unidentified.

When you hear of a UFO sighting you need to have a rapid way of knowing how important it might be. If you hear of several at once you need to decide on your priorities and spend more time on those that seem to be most significant. All too often an investigator will divide his time equally amongst any cases at his disposal; this is a most wasteful use of his resources.

In **Chapter 3** we defined a UFO classification system (based on one originally devised by Dr. Hynek). One can, I think, use this as a guide to priority in an ascending scale (with the possible exception that CE1 and INST cases are often of roughly equal priority). If several cases of equal priority are around at the same time further choices must be made. In practice most sightings will fall into the low priority categories and it could be that you will be forced to choose between several LOW or MED definition sightings.

In this instance a useful guide will be the number of witnesses. Single witness sightings have least priority. Multiple witness sightings are next (where a group of people together are involved). Most significant are those where independently located witnesses (even just two) see a phenomenon and report it as a UFO.

One should already have enough information to determine priority of investigation, but it is sometimes useful to take into account the standing of a witness. An airline pilot or police officer with some years' experience has probably quite frequently viewed the sky under misleading atmospheric conditions or at night. Whilst such people are human and do make mistakes (aircraft can crash and people can be falsely arrested) their testimony can on occasion be given greater weight. This is summarized in **Figure 4**.

A final point to remember. If you stumble onto a case which you feel is important or requires special facilities (e.g. analysis of ground traces or photographs) do not try to do it all alone. Contact a more experienced investigator, or one of the major groups, and ask for help. You can work with them and gain experience at the same time. It could be that you have come across some vital evidence and a mistake, born out of ignorance, could be both costly and crucial.

POINTS	CASE TYPE	WITNESS GROUPS	WITNESS TYPE
1	Low	Single witness	Experience in RAF etc.
2	Med	Multiple witnesses	Serving in army, air force etc. Pilot or policeman etc.
3	_	Independent witnesses	_
4	CE1 / Inst	-	-
5	CE2	_	-
6	CE3	_	-
7	CE4	_	_

Figure 4: Chart to determine case priority. Add up the points from each case. The higher the number of points the greater the case's priority; e.g., a sighting by a single police officer of a disc-shaped UFO totals 2 (Med) +1(Single Witness)+2(policeman) = 5.

Although no less prone to submitting IFO reports, Class "1" or "2" witnesses will often nonetheless adopt a structured approach towards reporting data and usually provide more detailed and precise observations - hence their higher witness type rating. Nonetheless, they are still susceptible to the unavoidable errors associated with human perception (i.e. the inability to provide accurate estimations of height and distance especially where no reference points exist, and so on).

References:

- 1. 'Ufology and Rationality', Morrell, Dr R.W., UFO Research Review, Summer 1978.
- 2. The reader is recommended to read the following on perception:
 - The Psychology of Perception, Vernon, M.D., Penguin, 1971.
 - Observing UFOs, Haines, Dr R., Nelson-Hall, Chicago, 1980.
 - WIE Sensation and Perception, Coren S, Ward, L. and Enns, J., John Wiley & Sons, 2003.
 - Blackwell Handbook of Sensation & Perception, Goldstein, B., Blackwell, 2004.
 - Basic Vision: An Introduction to Visual Perception, Snowden, R., Thompson, P. and Troscianko, T., Oxford University Press, 2006.
 - Foundations of Perception Mather, G, Psychology Press Ltd; 2006.

Things to do:

- 1. With the help of a friend stage a bizarre event. For example, dress him up in strange attire and get him to do something unusual that is over in a few seconds. If you have arranged this to happen in front of a group of people (e.g. at a party) be prepared to hand out paper and pencil. Then ask them to draw and describe what happened. At your leisure you can examine the differences in testimony and perhaps try to understand why some people saw what they saw. You can even come back some weeks later and try to obtain further drawings to see how memory has altered things. No doubt your friends will find this amusing.
- 2. Take any chapter of any book (or Internet webpage) that contains a number of described UFO incidents. Categorise them using the Randles/Warrington System detailed in Chapter 3, and also list them in the order of priority you would assign for investigation.

7: The UFO Witness

"It was just a shining beam of light ... and it seemed to be shining onto us, and we were frightened to death you know. We ran back into the house and slammed the back door, and I got on the phone to the lady at the local group. She asked me to go back outside and have a look ... I said, 'You've got to be joking" - Description by a witness and his wife of a sighting, given to UFOIN investigator Ted Horton (UFOIN Case No. 7820).

The witness to a UFO phenomenon can be frightened and confused. He may also be excited, and convinced that he has had a deep and possibly meaningful experience. It is therefore far from easy for a ufologist to be able to cope with this barrage of emotions and also extract pertinent data in a firm but gentle manner.

As you have already seen, the human mind has a capacity for altering data without conscious awareness that it has done so. Consequently, any late interview with a witness will necessarily be coloured by his need to tie up the loose ends. The precise details of an account cannot be accepted at face value, no matter how much one respects the integrity of the percipient. Of course it remains up to you to decide, from your evaluation of the witness, how close the account is to the true nature of the event.

Prior to any interview, investigators are strongly advised to study the **Code of Practice for UFO Investigators** (reproduced in **Appendix F**); a document which presents "best practice" in regard to conduct in the field, and (in particular) defines the ethical parameters of witness/investigator interrelations. Versions of this Code are followed by several of the more significant bodies involved in UFO work, including ASSAP and BUFORA. Ideally, you should adhere to these guidelines at **all** times!

Often just one interview will be possible, with little time and perhaps social or family pressures on the witness. Obviously, an ideal situation will involve getting to know a witness as a person, and talking to their family and friends without prying into private lives. In significant cases this is essential, as you cannot fully investigate a contact claim by visiting the witness just once. Whilst it may be preferable to hold initial interviews in a convivial location, it is usually important in such cases to see the witness in his home environment. This can often give indirect clues to the way of life an individual leads.

Who should be regarded as good or bad UFO witnesses? There is no clear-cut answer to this. One might feel that a police officer is better than a housewife, and whilst this may have some merit because of the observational experience of the former, they are both human beings responding to human failings. Children may be regarded with suspicion, but any tendency they have to fantasize or exaggerate is somewhat compensated by their curiosity and enhanced observational abilities. Furthermore, while a policeman may be more accurate than the average observer in recording details such as time or provide a better indication of direction (due to knowledge of

his "beat"), he or she is no better than anyone else at estimating height, or identifying specific classes of IFOs. This even goes for witnesses such as pilots (who mostly fly by instrumentation nowadays in any event). Avoid the all too common mistake of assuming the involvement of "expert" witnesses in a sighting somehow invalidates it from having a prosaic explanation! Virtually no profession provides any training in recognising the IFO types detailed in Chapter 9, although some (such as pilots, astronomers and meteorologists) may be familiar with those directly relevant to their profession – meteors in regards to astronomers, balloons in regard to meteorologists, aircraft at strange angles in regard to experienced pilots and so on.

On New Year's Eve 1978 UFO sightings hit Britain like a deluge. With many people out and about, on their way to parties or visits to relatives, and with clear skies when a spectacular object passed across them, there were hundreds of potential witnesses. It quickly became evident on collating the data that whatever the source of the stories it had been high in the atmosphere (as it was seen from Scotland to the south coast, and also from parts of Europe).

The immediate reaction from the scientists was that it had probably been a very bright meteor - but witnesses were in general adamant that the duration had been much too long for this (in the order of minutes, not seconds). Amongst the witnesses were several police officers, airline pilots and scientists - all of them trained observers.

They all saw the same event, but their accounts differed appreciably. Some said it was a long tube like a railway carriage in the sky, and others that it was a ball surrounded by a glowing trail of light. Quite a number were insistent that it was a solid, metallic object with a clearly defined row of windows. (1) **Figure 5** illustrates some of the variety of witness drawings. In fact it was found that the most probable explanation for these spectacular events was the re-entry of the booster rocket from Russian satellite Cosmos 1068, launched a few days earlier.

This case teaches us a great deal. Firstly, it shows that when viewing an extraordinary phenomenon which appears unexpectedly there is not the variation in perceptual abilities that one might imagine. Some of the least exaggerated accounts (based on what we know the phenomenon looked like) came from ordinary men and women. Secondly, it shows how there are bound to be individual differences in a multiple witness sighting. No two of these hundreds of people saw exactly the same thing, and there were wide discrepancies in subjective estimates such as size and height. Yet there were factors that could be isolated (such as time, size in relation to the full moon, and colour of the phenomenon). These were consistent enough to indicate that all had witnessed the same event.

A final interesting feature of this mass sighting came when the newspapers announced official explanations (usually at first hasty and totally false ones). Many witnesses reacted with natural hostility to the suggestion that they could not recognize a meteor

or a star when they saw one. They then insisted that what they had seen was much stranger and even added things to their story, such as periods of hovering (although it is certain this was impossible). They did this as a counter-reaction to the alleged mundaneness of what they believed to have been a very strange experience.

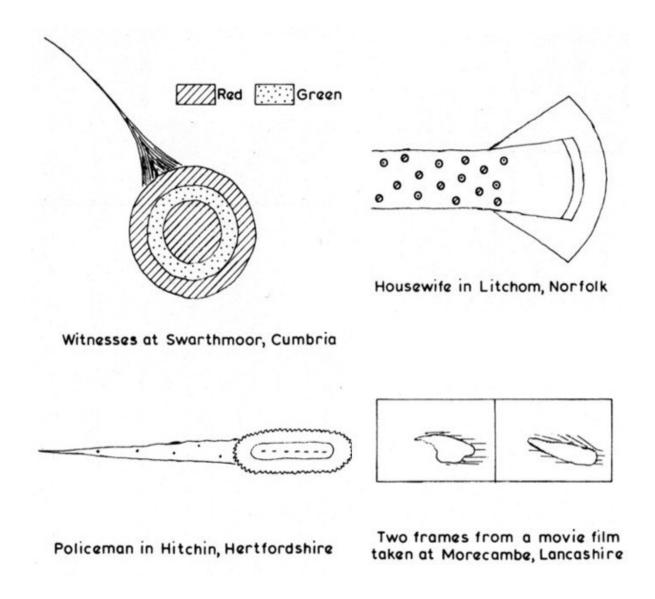


Figure 5: Four different versions of the same object, the re-entry of Russian Satellite Cosmos 1068 on New Year's Eve 1978, as drawn by four witnesses.

One must obviously carry this knowledge forward when dealing with any accounts made by multiple witnesses. What one should expect are individual differences in testimony, but a basic coherency in objective data (i.e. things which in general a witness does not have to guess at). It would be suspicious in the extreme if these witnesses all told identical stories. It would either indicate a prefabricated tale or that

they had discussed the matter at length between themselves resulting in a composite whole that probably bears little relationship to reality.

With a single witness the difficulties are greatly compounded. It will not be easy to sort out which elements of a story are very close to the truth and which are very far from it. Naturally one must try to find out how much experience a witness has had in observing the sky. Is he familiar with satellites, aircraft navigational light systems etc.? This you can easily ascertain, along with any relevant qualifications or background (e.g. time as a member of the Royal Observer Corps or flying in the Air Force).

It will no doubt be tempting for anybody who reads in a newspaper of a UFO experience to wish to rush over to the witness immediately and say, "I am Joe Soap of the XYZ UFO Club - tell me what happened!" This is not a very wise approach. You may be the fourth or fifth person to seek out this particular witness and he may by now be fed up with UFOs.

The best initial approach is to phone the witness, call round if he is not on the phone and you live close enough, or as last resorts write by first-class mail. On this first contact you should endeavour to put the witness at ease. Explain that you are fascinated by what happened, and if he wants to talk you would love to listen. If you sense that the witness is going to prove co-operative, then ask him to write his story down as previously suggested. Any interview must be at his convenience, and it is no good saying to him ... "I must speak to you now!"

If you have the feeling that a witness has suffered, either directly through the experience or from subsequent treatment by the media or "UFO experts", then gently suggest that you may be able to offer him help and advice. Let him come forth with any questions or worries he may have.

Once you have arranged an interview, do not launch straight into the attack. Spend time establishing a friendly rapport with a witness. Only introduce UFO groups or magazines if asked. Try to give the impression that you are simply one person who wishes to hear another's strange experiences. During this `warm-up' period find out about the witness: Who is he? What does he do? What are his interests? etc. Such information is indispensable and best obtained as a chat between yourselves (he may even want to know all about you, and if so do not hold back).

It could well be that you will be acting in your work on your own, and this does have advantages so far as putting a witness at ease is concerned. However, from a practical point of view it is more than useful to have a colleague with you at the interview. Not only will this afford opportunity (with permission of course) for the other person to sit in the background and make notes whilst you talk informally, but it also offers a second opinion. This could be vital, because you may well miss out on facial

expressions or slight inflections of the voice that could give a clue as to how a witness feels about an experience.

A second investigator may also enable you to dispense with the otherwise almost obligatory voice-recorder. Some witnesses do not feel able to talk freely into a microphone, and of course one should never be used without prior permission.

It is very useful to have as this "second investigator" one's husband/wife or boyfriend/girlfriend (if you can persuade them!). Not only does this help preserve a relationship (which may tend to come under fire if you start chasing UFO stories every hour of the day), but it serves a function with the witness too. When dealing with adolescent or emotive witnesses the presence of an investigator of the same sex can be a good psychological boost.

Of course the idea of more than one investigator should not be taken too far. I have known one instance where six investigators descended upon a witness at once. This hardly made him feel free to talk, without apparently addressing a public meeting!

It is important to allow the witness to tell his story once through without any comment from yourself. In this way you will see what he considers the most important features of the account. If it is clear that the encounter in some way disturbed him, then you must be prepared to offer aid towards the removal of this distress, before attempting anything else. For example, it is common for a witness to complain that he has not slept very well subsequent to the sighting. Allan Hendry even recalls one instance where a witness was so disturbed at seeing what eventually turned out to be a well-lighted aircraft that he tore down his neighbour's door in an effort to get other witnesses! (2) The assurances necessary in such instances always take precedence.

Many people are not aware how easy it is to lead a witness in a direction one unconsciously wishes him to follow. This can be done by framing questions in such a way that a desired form of answer is indicated, or it can be done just by the way that you react facially to the response of a witness. It is not easy learning to interview correctly, and it takes much practice.

Here is an example of `bad' interviewing. It is fictional for very obvious reasons. (I = Interviewer; W = Witness)

I: "Have you ever seen a spaceship before?"

W: "Er ... well ... I saw this thing like a light a few years ago. So, yes, I guess I must have."

I: "Now this recent spaceship ... err flying saucer ... how long did it land for?" W: "Well, I saw it go behind some trees so it must have landed for about thirty minutes or so."

I: "And how did you know that one of the aliens was a woman? I suppose she had longer hair."

W: "Well - yes, she might have done. She was like a woman. Not the same as the spaceman."

You can see here how the questions are virtually demanding certain answers. The witness is expected to have seen a UFO before. The investigator is clearly insisting the witness has seen a spaceship and aliens, and so on.

Now here is a real interview, upon which the latter was based. This did take place, and shows how the traps can be avoided by careful questioning. (3)

I: "Had you ever seen it, or anything strange, before?"

W : "No."

I: "How long was the cigar shape there for?"

W: "About half an hour."

I: "What gave you the impression the second figure was a woman?"

W: "It had a more womanly figure."

I: "Oh, I see ... I thought it may have been that it had longer hair. Did you see any hair?"

W: "No ... none."

An interesting illustration of these points concerns an event that took place on the morning of 1 December 1978. I had been up early to see my fiancé off to work and noted how unusually brilliant Venus was in the south, that cold and frosty morning. I thought little more of it until at midday I received a phone call from a young couple who were reporting a UFO sighting.

They described to me what was very obviously Venus, seen just four hours before. The object (into which they had read several unusual shapes, due to the crystal clarity of the atmosphere) had been present for two and a half hours in more or less the same place, and that is a sure sign of an astronomical explanation. I interviewed them by phone for some time and was in no doubt whatsoever about what they had seen.

The problem was that the witnesses had already been interviewed by the newspapers and the television, and the obvious implication being continually stressed to them was that they had seen a UFO. This had reinforced the belief in their minds, as it would with anyone. I had told the media what they had seen, but at that time the media were not interested (I later had the opportunity to clear up the matter on television). This was despite the fact that both the police and the Manchester Airport authorities supported my view on the sighting.

Following the publicity, UFO investigators came along and told the interested witnesses all about UFOs. Technical terms (such as 'solid light') were explained to

them, and subsequently incorporated into the witnesses' accounts. They were even shown pictures and asked to pick out which one looked most like the UFO they had seen. Of course they picked one - despite the fact that when I had interviewed them they had seen no more than vague lights.

What had happened here is quite understandable. Investigators, in their eagerness, had set a clear pattern in the minds of the witnesses as to what they were expected to have seen. Their minds were already susceptible due to the intervention of the media. After a couple of days of this the witnesses were firmly believing their new version of the story, despite the fact that it is certain that they saw no more than the planet Venus. Such is the power of suggestion. (4)

What kind of data must one extract about a case? Irish ufologist, John Hind, named eight criteria that he felt were essential "to test a report against natural or man-made phenomena". These were:

- Time and date.
- Location of witness.
- Colour.
- Duration of sighting.
- Direction of motion.
- Relative size.
- Bearing.
- Elevation.

He found that, apart from the first three, a low percentage of investigations contained such data. As he puts it, "much, much more should be included as routine in competent reports". (For example, weather data, sharpness of image etc.) (5).

A list of recommended questions are detailed in **Appendix A** of this book.

Some of this data is quite objective and there will be no difficulty in obtaining accurate measurements from a witness. However, bearings and elevations need to be demonstrated (i.e. get the witness to point to where the object was - preferably at the sighting location - and then measure these yourself). Size and duration are often very poorly estimated. For example, a short duration is extended in the mind of a percipient. It is crucial to have a close approximation of the duration as this often serves to rule out possible explanations. So take great care in obtaining an accurate estimate.

As for size, the only safe way is to ask the witness to view various things held at arm's length - e.g. a matchstick head, coins of varying sizes and so on. It is amazing how many people think that a ten pence piece held at arm's length would be needed to cover the full moon. The truth is that even a five pence piece (the smallest British

coin) is several times too big. People find it easier to contrast sizes with the full moon, rather than with hypothetical things (like a coin at arm's length). So, unless you can demonstrate, ask for a comparison relative to the size of the full moon.

This leads us to the question of whether standard forms should be used to collect UFO data, because even the best of these ask questions which the witness would find difficult to answer without guidance. It sounds like a good idea to use such sheets, and almost the first thing many investigators do is rush off and devise their own (usually totally inadequate) form. However, there are disadvantages as well as advantages.

Advantages include the fact that it provides standardized data useful for research. They also serve as an aid to memory to ensure that all relevant data is obtained by an investigator. The disadvantages, however, can be considerable. All too often an investigator is tempted to use the form as an excuse for not investigating a low strangeness case. He will send it off to a witness in the hope that it might be returned. Often it is not, and perhaps an interesting case is lost. If it is sent back, data will be incorrectly recorded due to the inevitable failings of any form, and significant factors that might have been brought out by talking to a witness may simply not find their way onto the form and their existence will never come to light. Perhaps most damaging, however, is the problem that the form is standardized, and does not take adequate account of the individual differences in cases. Each case needs an individual approach if it is to be investigated properly.

It is a matter of personal choice. I, myself, never use report forms since I find myself able to fulfil my job just as well without them. If they are felt to be useful, by far the best in Britain are those devised by BUFORA (British UFO Research Association). These are designed as a set to cover various contingencies, and if used properly can be beneficial. Additionally, the American UFO group MUFON (Mutual UFO Network) have produced various report forms covering most types of UFO event (6).

Even if a form is not used it is important to obtain the witness's signature, if only to add authenticity to your report. The best method is to ask him to check and sign the factual part of your report. For obvious reasons do not show him the part where you evaluate him or his account!

It is all too easy to slip into a regimented frame of mind about UFO investigation. Naturally, there are things that must be done in all instances, but it is essential to treat each case as it comes and plan your work on it as you progress.

Apart from factual data questions there are some subjective ones that investigators tend to overlook. For example:

- 1. What did the phenomenon most resemble that would be identifiable? Why does the witness think that what he saw was not this?
- 2. What books, if any, has the witness read on UFOs and does he hold any opinion about their nature or origin?
- 3. Who has the witness talked to about his experience since it occurred, and how did they react?
- 4. Why did the witness choose to report the phenomenon to the person or persons to whom he did? For example, why did he contact a newspaper?

Another question you must ask is whether or not the witness has any objection to his name being used in connection with the sighting. If there is any doubt, insist on anonymity.

Naturally it is very much up to you how much time you spend on an individual case. Some ideas for a preliminary guide to priority were given in the previous chapter. Some ufologists feel that every case is potentially significant and must be investigated in depth with this in mind, even if it does appear to be explainable. In practice this is normally impossible. Ken Green explains why selectivity is necessary: "UFO investigations may be, as Bernard Delair puts it, `the bricks from which the ufological house is built', but this is only so if they supply some solid information. If this appears unlikely then the case should be given low priority from the very outset." (7)

The test for whether an investigator has done all he should was summed up by Martin Keatman: "Look at your reports and ask yourself -`Are these good enough to be used for objective scientific research?' ... sit back and think deeply on how you can improve your reports. Remember, it is the one thing you are personally contributing. Don't make it a waste of your time and everyone else's." (8)

As a final thought, what should one tell a witness? Should you promise to let him know if you explain away his sighting? In my view the answer must be only if he specifically asks you to do so. It is a dangerous pursuit, and I have been taken to task for it several times by witnesses who disagreed with what is always a subjective evaluation. Never commit yourself unless you have objective evidence you can present to a witness to prove that what he saw was identifiable. Do not fall into the trap of debunkers who tend to present a "probable" identification. It may be valid, but if it is uncertain it is likely to lead to friction.

Some witnesses will be happy to learn that you have found a cause for what puzzled them. Others may well feel that you are calling into question their powers of observation, or even their integrity. Probably you are not, but that is irrelevant. Of course, if you do not know what they experienced then do say so. "I just don't know"

is a much better response than, "Well, you saw a UFO." That can be interpreted by a witness in any way he likes, and very probably will be.

References:

- 1. See almost any British local or national newspaper for the first couple of days of January 1979.
- 2. `The Case for IFO Study A Recent Example', Hendry, A., International UFO Reporter, CUFOS, June 1978.
- 3. Interview conducted by Paul Whetnall with UFO witness "A.H" late 1970's.
- 4. "Vendetta with Venus" Randles, J., MUFOB, Spring 1979.
- 5. "Never Mind the Quality, Feel the Width", Hind, J., Northern UFO News, No. 42, November 1977.
- 6. Both available via their websites; URL's at time of writing: http://www.BUFORA.org.uk and http://www.mufon.com/, respectively.
- 7. "How Far Should We Go?", Green, K., Northern UFO News, No. 39, August 1977.
- 8. Investigation Standards', Keatman, M., Northern Ufology, No. 56, January 1979.

Things to do:

- 1. Ask a friend to select one UFO account with plenty of detail from a book you have not yet read (or not read for some time). Let him read it just once memorizing what he can from it. Then, without your knowing which case it is, interview him to obtain the basic facts. You can then check these back to the original report. Differences will occur, due to faulty memory etc., just as in a real UFO situation. Whilst the analogy is far from precise, it will show you how to improve your personal interview technique.
- 2. Spend some time talking to people of different ages and social standing to yourself. Practise getting them to respond favourably to you, and to talk freely about themselves. This is the essence of all interviewing technique.

8: FIELD STUDIES.

"Within the context of this dossier it is unimportant, at this stage, to try to identify all the LITS seen ... It is far more profitable to ask whether the phenomena reported are related in some way to the local geography ... {this area} has a history of transient aerial phenomena ... Why?" - Report conclusion by Ken Phillips (UFOIN Case No. 7819).

One might expect that the best place to find advice about following through UFO investigation would be the report by the Condon Commission. After all, this was a team trained in scientific methodology which had spent two years studying the phenomenon. However, here is what we read in the relevant section: "Our own field experience leads this writer to question the value of field investigations of any UFO reports other than which; (a) offer a strong likelihood that information regarding meteors, satellites, optics, atmospheric properties, electrical phenomena or other physical or biological phenomena would be generated by the investigation; (b) present clear indication of a possible threat to a nation or community, whether in the form of international or intra-national hostilities, physical or biological contamination of environment, panic or other emotional upheaval; or (c) are of interest as sources of information regarding the individual or collective needs and desires of human beings". (1)

This suggestion seems to imply that no credence whatsoever is placed upon UFO accounts which apparently offer evidence of any kind of new phenomenon. This is despite several references within the text of the report to highly tantalizing cases without any solution. For example, one case involved the classical car-stop incident, where an alleged force field from a nearby UFO cuts out the car's power. The investigators found no real cause to doubt the story at all, and it was very similar in content to many other such instances in the literature. (2) However, the car (as is usually the case) showed no signs of having been subjected to an intense magnetic field. Instead of taking the obvious scientific view, and investigating this paradox to search for any other causation, the report very thinly concluded: "More detailed investigation of this event as a source of evidence related to the electro-magnetic effect on automobiles did not seem warranted". (3)

In my opinion it is the duty of an investigator to adopt an open-minded scientific approach. He should always be alert to challenges such as the one presented by the above case and search for alternative possibilities. It is no solution to do what the Condon Commission did. To leave the case "unidentified" in the anticipation that people will forget and disbelieve it is nothing more than scientific cowardice.

As has already been pointed out it is essential to visit the site of an alleged UFO occurrence, with the witness if at all possible.

As previously mentioned, at the site it will be much simpler to obtain accurate elevations, bearings and even size estimates from a witness. Here he can relate what he experienced to the fixed surroundings. You can also have a good look at the area yourself, and perhaps suggest some possible causes for the phenomenon observed.

One case in the summer of 1973 referred to a floating mass of greyish material, drifting away slowly and changing shape as it did so. A visit to the locality produced the fact that there was sewage works in the vicinity. Discussions with employees there brought forward the suggestion that the witness may have observed a gaseous emission from the works. Such a solution would obviously have never been considered without an inspection of the site. In this respect an up-to-date Ordnance Survey map detailing the general vicinity of a given sighting location is an essential tool.

There are many unusual precipitations of UFO sightings, and the investigator must always be alert and ready to spot anything within an environment which might be responsible. Local factories, flocks of birds, and unusual swarms of insects are all potential clues to the nature of what was observed.

There is, of course, the other side of the coin. If an account turns out to be unexplained then careful compilation of what goes on in the locality might, conceivably, link with the reason why a UFO manifested there. The late Ken Phillips, the investigator quoted at the head of this chapter, made a significant point about previous accounts of anomalous aerial phenomena previously occurring within a specific sighting location. Other researchers have also noted the tendency of many UFO accounts to re-occur in specific locations or be associated with certain geographical features (4), (5). Such work has particular bearing on the "earthlights" theory discussed further in Chapter 9. In any event, data on the sighting environment is an essential feature of any final report.

Recent aerial photographs of a sighting location can be acquired via the Internet for around £30.00 – £100, while older RAF/County Council images - dating from 1940's through to the early 1990s - can often be found at your nearest Local Studies Library, often in the form of high resolution photocopies costing only a few pounds. The latter source (along with the larger local libraries) can also provide old edition Ordnance Survey maps (the latter providing such maps for only the price of a photocopy). Those up to 50 years old can be freely reproduced for research purposes - but do **not** use more recent editions of their maps for this purpose, as they are still protected by Crown Copyright! Both are ideal for annotation of sighting-relevant details, especially if rendered into a digital format and edited with a graphics program. (6)

It would also be useful to take a number of photographs at the site. This, in the case of apparently significant accounts, must not be omitted. Views of where the witness was and what he would see from that place are good starting points. If you have a wide-angled lens it is also a good idea to take shots centred on the witness location which

can be pieced together to reveal a 360-degree panoramic view. The motions of the object can then be plotted on this (see **Figure 6**, below).

Despite taking measurements with a witness at a site one can never be sure how accurate his estimations are. One method to help alleviate this is to try a few simple reconstruction exercises with him. For example, he could be asked to gauge the distance between himself and a tree in the middle distance, which you have previously measured out (or will do so then).

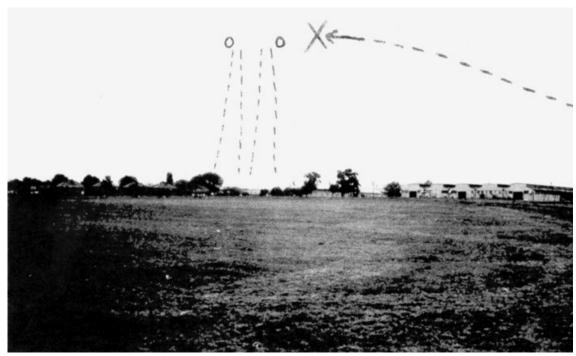


Figure 6: An example of a panoramic photograph of a UFO sighting location, with an illustration indicating the movement and relative size of the phenomenon observed.

Some work has, in fact, been done on testing the accuracy of people's observations in a UFO context. It was found that an average of about 65% general accuracy could be estimated, although there were variations according to the type of visual stimulus. This was for an observational time of just ten seconds. This work was very embryonic, and others have subsequently conducted their own similar experiments. (See **Figure 7**). (7)

Having obtained accurate factual data about the sighting, background information on the witnesses, and environmental factors about the locality of the occurrence, one is now in a position to investigate the case. You might think that you have been doing this already, but this is not so. All you have been doing is collecting information as a preliminary to your real task.

Never forget that approximately 90% of all UFO accounts can be explained in one way or another. That thought must always be paramount in your mind. No doubt, with

experience, you will filter out cases readily identifiable and this 90% figure will drop for your individual work. Even so, you must always work on the assumption that you will find a solution to a particular case. Anything half hearted will lead to inconclusive results.

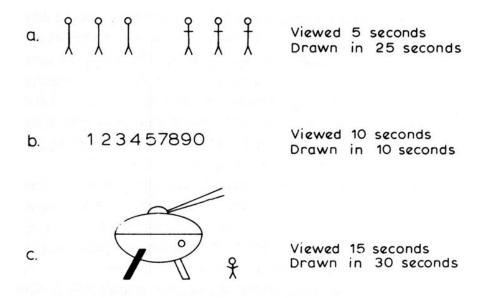


Figure 7: Part of an observation test conducted by John Ledner of SCAN. Participants were shown drawings A, B and C (and others) for the length of time indicated, then given the noted time to redraw them from memory. Drawing A produced 82.2% accuracy; only one person did not get drawing B completely correct; and drawing C produced just 63.88% accuracy.

There is one thing you must do in every case that comes this far; that is to obtain weather data. There are many possible sources for this; a speedy approach, however, is essential. To find out what the weather conditions were at a certain time and place five years ago will be almost impossible (without large outlays of money to the meteorological office to compensate for their search).

Local meteorological offices will be listed in the telephone directory and should be able to help. Airports also have to keep records. If there is one that operates full-time, either civil or military, and yet is not especially busy, you may find yourself in luck. Unfortunately it is now becoming the norm for many metrological offices, airports and other similar bodies to ask for a substantial charge to supply such data. Nonetheless, you may (eventually) be lucky enough to establish contacts in such institutions – but do not bank on this happening or abuse those you do manage to forge by calling them every two or three days for aid! Otherwise, major reference libraries also keep charts of local weather for a few weeks.

The kind of report you need is fairly extensive, including cloud ceilings and wind speed and direction. Indeed, these are usually the most important points. The time and

place of reading must also be close to that of the sighting as weather can vary substantially over an area or period of time.

The person with whom you do establish contact may also be willing to offer comment on the possibility of freak meteorological phenomena as a cause for a particular sighting. He will have a good idea, for example, whether ball lightning manifestation was likely under given conditions (see **Chapter 9**). **In UFOs: A British Viewpoint** an illustration was given where a meteorological office was able to supply information on local thunderstorms and their motions and thus provide a feasible solution to one sighting. (8)

Appendix B of this book presents a list detailing the likely order of progress of a UFO investigation, as a guideline around which you can work. In this vein it is useful in each case to draw up a checklist of the things to do in the order you think you should do them. **Appendix C** presents a list of contacts forms space, for you to compile your own list based on your home area. You can use this for constant reference.

It is sensible to think of the most obvious explanation first. Quite probably this will be the one that the witness said the phenomenon most resembles (see page 45).

For both daytime and nighttime sightings this will usually mean checking the local airports at some point. However, the current security climate have made airports very wary of supplying such information to unofficial sources - and those that do often charge a substantial fee to carry out such checks.

In any event, they will not keep records of air movements for very long, and it's no good approaching them six months after an event in the hope they will be able to assist. If you are fast enough, however, they may be able to inform you of any likely culprit aircraft. They may say, however, that they know of no aircraft in the vicinity at the time; this does not necessarily mean there were none. Aircraft not subject to airspace control can overfly a region without contacting the local airport. Airports are also the source of information about the release of weather balloons. These are released into the atmosphere to discover weather data. Often they reflect sunlight off their surface; this can give rise to long duration, slow-moving UFO sightings.

It is also possible that military operations were in progress, and the military are hardly likely to give out information to anyone who happens to call them. If an airport says it had nothing on radar do not suspect a cover-up. Of course there are controls over the release of such information, but a read of chapter 6 of **UFOs: A British Viewpoint** will illuminate the severe problems in radar interpretation. As you can see, checking for air traffic is not as simple as it might at first seem.

The other prime source of information concerns the many and varied astronomical phenomenon that abound in our skies. Thanks to the sophistication of modern

technology it is a simple matter to acquire highly detailed information relating to the position of astronomical bodies at the time of a given sighting, via various (relatively inexpensive) astronomical computer programs (9). Some of the better ones also contain - or have the capacity to store - data on other phenomena such as naked-eye comets and meteor showers; otherwise such information can easily be obtained via the Internet (but please ensure you acquire this information from a reliable site!)

Since astronomical phenomena are such a principal source of UFO explanations it is necessary for you to take your knowledge beyond the introductory level which the next chapter will give. Your public library will have numerous books on what is a very popular modern hobby and those written by Patrick Moore and Ian Ridpath are good introductions. They may be UFO sceptics but they certainly know their astronomy (see Chapter 9)!

Although the Internet (in conjunction with a suitable astronomical computer program) makes it possible to track down particular artificial satellites, this is usually not worth the effort where obvious descriptions of such an object are concerned - especially as there are so many of them! However, you may need to do so in instances where the reported form is associated with one or more ambiguities, or involve the more prominent ones such as the ISS. That stated satellites usually generate fairly straightforward reports where a "probable satellite" evaluation will suffice.

One of the great frustrations of UFO investigation is the amazing wealth of potential explanations. Arch UFO debunker, Dr Donald Menzel, made at least one significant contribution to our researches by producing a structured list of 109 of them. There are even more than this nowadays! (10).

Clearly, it is a sobering thought to accept that it will always be impossible to consider everything. There will naturally be some explanations that are just impossible (for example, an English sighting could not be an optical reflection of the sun if it occurred at 2 a.m.). Even so, one has to possess tremendous versatility and perseverance to pursue an investigation as far as one can go. In the end one will still not have covered everything, but at least a reasonable attempt will have been made.

You must remember that you are conducting your work for more than just enjoyment. If the work you do is to be of any value it must stand up to being read years from now and it must convey to the reader not only precisely what happened, but what you did about it. There should be no questions framing in the reader's mind that you have provided no answer for by your work. It is a tall order indeed, but one you must strive to achieve. Be sure in your own mind that you have exhausted all feasible possibilities, and offered reasoned arguments for and against the validity of each one. Only then can you have been said to have investigated the case - even if the work takes months in some circumstances. A promising case has to be worthy of such treatment, and you may well be the only one capable of doing it.

References:

- 1. Scientific Study of UFOs, Condon, Dr E.U., Bantam Books, USA, 1969. Field Studies, Craig, R., p. 74, Bantam, New York, 1969
- 2. "Frightening Car-Stop near Nelson", Grimshawe, A., & Randles, J., FSR Vol. 23 No. 2, 1977
- 3. Scientific Study of UFOs, Condon, Dr E.U., Bantam Books, USA, 1969, Case 39, pp 380-385
- 4. The Pennine UFO Mystery, Randles, J., Granada 1983.
- 5. "Monitoring and Processing UFO Data", Delair, J.B., Awareness, Contact UK, Autumn 1976. "UFOs The Tip of the Iceberg", Delair, J.B., Awareness, Contact UK, Summer 1978
- 6. A good source of old aerial photographs is English Heritage (http://www.english-heritage.org.uk/). When buying mapping material note terms of use, as they can be draconian!
- 7. "Simple Observation Testing", Ledner, J.B., SCAN, Bournemouth, July 1976 and "The Witness as a subtle and Complex Instrument of Observation", Digby, R. Journal of Transient Aerial Phenomena, Vol 4, No. 4, March 1987, 121-128.
- 8. UFOs: A British Viewpoint, Randles, J. & Warrington, P., Hale, UK, 1979, pp 73-74
- 9. The "**Redshift**" series can be particularly recommended, although **any** program suite that can accurately determine, display and print the azimuth and altitude of naked eye stars, the Sun, Moon and planets for any time and date during the 20th and 21st century will suffice. That stated, the majority of programs on the market are very flexible and comprehensive and will exceed the needs of most UFO investigators!
- 10. UFOs: A Scientific Debate, Sagan, C. & Page, T. (Eds), Cornell University, USA, 1972.

Things to do:

- 1. Attempt the observational test suggested by John Ledner in Reference 7. Find a group of about half a dozen people, of varying ages if possible (your family may well be perfect). Then collect together a few drawings some simple, for example a flowerpot, and others more complex, perhaps even a UFO. The drawings must not be too complicated, and must have a few clear-cut lines. Show the drawings, one at a time, for ten seconds, after which each person has just twenty seconds in which to redraw it from memory. Subsequently you can devise methods of judging how accurate their perception was. John Ledner awards one point for each stroke (or line) that is in the correct place and alignment. An average accuracy for the group can then be calculated. If you use this on a broader scale it will give you some appreciation of the perceptual judgements of people with differing ages and backgrounds.
- 2. Find in the literature a UFO sighting that occurred somewhere near your home town. Examine an Ordnance Survey map of the area and see if you can come up with any potential sources of explanation based upon the environment.

9: Turning UFOs into IFOs

Unless there are two of this particular type of UFO (and this is extremely unlikely), a mysterious, triangular-shaped object from Northwich is on a world tour. - Report conclusion for a sighting, which actually proved to be a misidentification of a jet aircraft

As I continually stress, ninety per cent of all properly investigated UFO accounts can be explained as a misidentification of some known phenomenon. This is most important because it means that an excessive amount of any ufologist's time is spent handling spurious data. For this reason he must be in a position to be able to isolate, speedily and efficiently, those cases which do relate to misidentifications. The basic UFO (Unidentified Flying Object) is thus turned into an IFO (Identified Flying Object). If it is not then it remains a UFO unless the evidence is strong enough to suggest it will never become an IFO (in presently understood terms). In this event, it becomes what we are seeking - the **TRUE UFO**.

There are many illustrative examples which could be given of how circumstances can turn an ordinary event into a UFO misidentification. I will give just one.

It was a Friday evening in April 1978. I was waiting for my fiancé to arrive at my former home at Irlam. He normally arrived at 9 p.m., but it was already approaching an hour after that. At the door I was rather furtively glancing in the direction from which I knew he would come, and at the same time idly looking across the gloom-laden fields that surrounded our bungalow. I spotted a light, low in the sky to the west, but paid little attention to it as my mind was on other things. My initial reaction had been that it was a light on one of the farmhouses in the distance, but as my mind half-heartedly traced out the horizon line I realized it was too high. Whatever this was it was in the sky. Snapping back to full concentration I noticed it was a dull orange and quite stationary.

My next reaction was typical of what Allen Hynek termed the *escalation of hypotheses*, as a witness tries phenomenon after phenomenon to explain what he is seeing. I decided it was an aircraft heading directly towards me, thus appearing stationary. Yet after about thirty seconds a little nagging doubt entered. It had been stationary for too long without any apparent change in brightness. I now began to consider the possibility that it might be something strange and called my parents to the door. They stood watching with me, but were not unduly impressed. After all, it was just a light! Still, they were a little puzzled. Just in case, I decided to get my camera and asked them to keep watch. It had now been there for about two minutes or more. If you are wondering why the photograph of this UFO is not on the cover of this book I will explain! I never did get the camera. My mother called me back to say that it was going - and sure enough it was. It was fading into nothingness.

Just before I had left the door I had noticed a woman out on the "Moss" beside our house with her dog. She had obviously seen us looking at the light and was staring at it too. The dog seemed to prefer the various sniffs on the grass to this wondrous visitor! She was no more than a hundred yards closer to the object than we were (if that), and it appeared to be at least a mile away, so to all intents and purposes she must have been viewing what we were. When I came back to the door I did not notice if she was still there or not. I gather now that she was not. My parents left the scene very unperturbed by what they had seen. I stayed on for a few seconds in the hope of a resolution to the riddle. It came. At the point where the light had faded out I saw the flashing navigation lights of an aircraft. These climbed away slowly southwards and were soon lost to sight.

Naturally, I thought no more of it, merely noting that a nearby farm had been using a helicopter for crop spraying and that it was a perfectly acceptable solution to all the features of the sighting. However, on the Monday morning I returned from a weekend away to find a journalist from the local newspaper ready to interview me. The woman with her dog had reported to him what she had seen, and also that I had been at my front door and so must have seen it too. The reporter did not know of my UFO involvement and I decided, for present purposes, not to enlighten him.

The trouble was, you see, that the woman had reported a domed disc the size of a bungalow with flashing lights inside it. She thought it was only feet away from her! Moments after seeing it there she had fled the scene in terror.

I am still not completely sure of what happened here, or how. The woman was adamant about what she saw, and I do not doubt her word on that. Yet so far as we were all concerned there was just no way she was any significant distance closer to this light. There is also absolutely no doubt in my mind that it was the helicopter in question. Presumably her preconceived ideas dictated what she read into the light, after she had accepted it was a UFO. This is, of course, always assuming no more sinister motives - such as a UFO which, knowing my involvement, disguised itself as a helicopter just for my benefit! I am well aware that there are those who will regard this as a serious possibility.

The woman had run away before the navigation lights were displayed (as the helicopter climbed into the airways). The glow was a yellowish searchlight that is used to light up the ground in dusk conditions.

The lessons here are obvious. Even if a witness comes to you with a fantastic story that, seemingly, under no circumstances is identifiable, it always potentially is. In this instance the woman gave a great deal of subjective data, but the objective facts were so few and of such short duration that an investigator should have been aware of the possibility of an explanation and could have found one by checking. The worst kind of investigator (and there are many of these) would have said - "obviously this was no

aircraft, it must have been a UFO." That would have been the end of it, so far as he was concerned. Sadly you can find this attitude reflected in many of the paperback books that are churned out in the wake of each new UFO wave. If one is to believe them, spotting a UFO is about as easy as going outside and looking for the sun!

We shall start off by looking at simple natural phenomena that can give rise to false UFO sightings. From here we shall progress to man-made things in the skies. The record will be far from exhaustive. You are strongly urged to read the recommended texts in the reference section of this chapter. Also study the flowcharts presented at the end of this chapter - bearing in mind they only represent the more common types of IFOs. Tables detailing **every** phenomenon capable of generating false UFO reports would be significantly more complex! So, remember how important flexibility is. You never know when an unusual event is going to be responsible for the account in question, and you just have to be prepared for this. The best thing to do is to think of the most logical possible explanation and check it out. Then tabulate points for and against the acceptance of it - for example:

FOR:

- Aircraft-like speed.
- On an airway.
- Flashing lights typical of an aircraft.

AGAINST:

• Reported oval shape.

It is then up to you to decide whether the points against are critical enough to oppose the acceptance of this explanation. The "oval shape" in this example, were it the only factor, would certainly not be enough. Shapes can be "read in" to an observation, as the illustration on the previous pages was meant to indicate.

Let us start with astronomical phenomena. You would be surprised how often these do give rise to UFO accounts. Believe it or not, the sighting of ordinary stars and planets is often misconstrued. Here is one example.

A witness and his wife reported that for several nights a UFO had `landed' to the west of their home. Through binoculars it had appeared green and large and possessed windows. It would "land" at various times in the early evening, and was seen several times a week. Its motion was always slow and controlled, being visible for a long duration until it "landed" and "turned off its lights". (1)

The account contains all the details necessary for presuming an explanation. The actual investigator was easily able to determine precisely what it was. (See page 59 or the solution).

Stars and Planets

These are situated at some great distance from the earth (the stars being appreciably further away than the eight known planets). All move - relative to the earth - in an east to west direction. They will thus appear to "rise" and "set", like the sun, and move at a similar sedate speed. Over a long duration (e.g. an hour) this motion can easily be confirmed by reference to some fixed point on the ground, but of course the stars do not move relative to one another, and so if no reference point is available such motion will be difficult to judge. (2)

Stars have differing brightness (called stellar magnitude) – the lower the rating, the brighter the body. While bright stars seemingly have an angular size, every single star is much too far away for the human eye to see it as a rounded shape. It is purely a point source; the illusion of shape is, however, a very common one. Furthermore, the mind equates brightness with proximity; hence changes in brightness (due to atmospheric factors) may be mistakenly interpreted as a "UFO" repeatedly approaching and receding from the witness along a line-of-sight path. The same illusion is also reported in IFO reports involving planets (see below). The brightest stars visible from Britain are (in order of magnitude): Sirius (-1.46), Arcturus (+0.72), Vega (+0.03), Capella (+0.08), Rigel (+0.12), Procyon (+0.38), Betelgeuse (+0.50), Altair (+0.77), Aldebaran (+0.85), Antares (+0.96), Spica (+0.98), Pollux (+1.14) and Deneb (+1.25). Unlike planets and the moon, stellar magnitude is constant, unless affected by atmospheric or other meteorological factors.

There are many other optical illusions involving the stars. A principal one is called **Autokinesis**. Here a bright light (the star) appears to move in relation to the dark background because of the lack of reference points. It will seem to dart about erratically, but in fact the distance covered is never more than a few times the diameter of the full moon. This effect can be experienced by anyone, and it has nothing to do with how good or bad one's eyesight is. It can be startling.

Naturally, the presence of clouds in the sky can be a further complication. Here their relatively fast movements cause a motional illusion with the stars. It is a similar effect to the one you experience in a stationary railway carriage as a moving train passes by and causes the illusion that you, in fact, are moving as well. Clouds may also obscure a "UFO" (star) that has been visible for a long period, making it seem to "streak away at tremendous speed" or "go out like a lightbulb" (both common descriptions by witnesses who are victim to this effect). If the sky overhead is cloud free it is easy for an observer not to relate the disappearance to the presence of cloud. It is a simple matter to isolate accounts that refer to stars.

Telltale signs: Long duration (up to several hours in many cases) and slow motion relative to the earth (excluding all random, illusory motions which will not affect the apparent overall motion). You should immediately suspect anything that was visible - more or less in the same place - for an hour or more.

Another factor to consider is the flashing that stars sometimes appear to demonstrate. This is caused by disturbance in the atmosphere and is more pronounced near the horizon (where heat from the ground rises to cause turbulence). Stars can appear to change colour dramatically or more slowly (often following a red-green-blue sequence). This often results in the affected body resembling a stationary aircraft or helicopter! Consequently this "flashing" or "pulsating", as witnesses often describe it, should not be a problem if the telltale signs are present. This can also enhance the autokinesis effect.

Planets are very similar to stars in appearance, except that because they are relatively close to the earth they move against the star background. This effect, however, is so slow that it is only visible over a number of nights; this relative motion will not, therefore, be seen in one single observation and for a one-off sighting planets will look like bright stars.

Their brightness does of course vary, according to how close they are to the earth at the time. There are really only four planets which act as feasible suspects for a UFO sighting. **Saturn** only rarely becomes very bright, but can sometimes appear so (up to a maximum magnitude of +0.43). **Jupiter** does, however, often appear extremely bright (maximum magnitude –2.49), and therefore large in `size'. Both these planets can take on a yellow tint. **Mars** as most people know, is reddish and becomes very bright every two years or so for a few weeks (reaching a maximum magnitude of -2.91). However, it is **Venus** (which can reach magnitude –4.60 in some situations) which is the archenemy of the ufologist. It can be so brilliant that it seems blue/white. All four of these planets can cause UFO sightings, but Venus is certainly the most common culprit. This is because it is very bright twice a year - once in the evening and once in the morning. **Mercury** is so close to the sun that it is visible only briefly around sunrise or sunset (maximum magnitude –1.9), and is often thus swamped by the glare of the sun. The remaining, more distant, bodies - **Uranus**, **Neptune** and **Pluto** - are too dim to be seen by the unaided eye.

All the effects mentioned about stars also relate to planets, but often more so as they can be exceptionally bright. Venus at its most brilliant is a spectacular sight indeed. The difference is that since they move relative to the stars they can suddenly `appear' in the sky if it has been cloudy for the previous few nights, or if one only goes out for a few moments at a particular time each night. After several nights of viewing an ordinary sky Venus, or Jupiter, could suddenly be there, having risen on the horizon at that moment on that night. Naturally some people suspect these wanderers (as the name planet means) of being an intruding UFO.

Telltale signs: The same as for stars, and also that the planet will be visible in a slightly different relative position over the next few nights. Venus is often reported as a "cross shape", and Jupiter or Venus as a "gigantic ball" - all optical illusions due to the excessive brilliance. Such shape illusions are much more common if a witness

is viewing through binoculars or window glass. Aberrations in these can lead to all kinds of distorted shapes and a magnified image. A common one for Venus is "a dagger in the sky". Duration (as with stars) can be up to an hour or more.

Two planets (Jupiter and Venus) were, in 1975, by chance positioned close together in the sky. This proximity lasted just a few days but gave rise to spectacular UFO sightings on the first clear night of this conjunction. (3)

The case quoted earlier, by the way, of the UFO that `landed' to the west (see page 56) should now be identifiable by you. It was in fact Venus - with Saturn at its brightest not very far away and complicating the issue.

In order to identify a particular star or planet you will find plenty of help at a large bookshop with an astronomical section. A book entitled **The Astronomical Yearbook** is published annually, and gives monthly star charts and planetary positions to enable you to work out the location of all major features in the sky. If you are dealing with a foreign location (or live outside Britain) similar aids are available. Astronomical computer programs - as mentioned in the previous chapter - can generate even more precise information for any time or location. If you discover that a bright star or planet was in the position referred to by the witness, ask him the obvious questions. Was the sky clear? (You should have checked this anyhow.) If so, did he see a bright "star" in that part of the sky? If he says "Yes", then it may mean you have to go back to the drawing-board in your search for an explanation. If he says "No", then it seems safe to conclude that he did view the said star or planet as a UFO.

Sun and Moon

Even these have been mistaken for UFOs on occasion. The **Sun** (magnitude –26.74) is misidentified most often due to optical reflections of its light. Called **Mock Suns**, these can be viewed on cloud to the side of the actual sun. The sun can sometimes look strange just by shining through high, thin cloud and appearing opalescent. The **Moon** especially when full (magnitude –12.74) is a surprisingly common source of UFOs. An optical illusion, which is still not fully understood, occurs when it is close to the horizon. Whilst it is no closer than when at its zenith, it does appear appreciably larger, and due to atmospheric factors (as with stars) can take on strange shapes and a deep orange colour. If it enters cloud it will slowly alter shape, as it is covered part by part. This too can lead to mistaken identity. There are even reflections that can be caused by the light of the moon shining on ice particles in clouds, much as with 'mock suns'. These may look like fuzzy patches or even rainbows.

Telltale signs: Again, relatively slow movement (although the moon does move several times faster than the stars and can be seen to do so even over a period of minutes). Duration may be upto an hour or so, but that of any atmospheric distortion effects will be much more transitory. The orange/yellow colouration and approximate round shape are also useful clues.

It is fairly simple to check the position of the sun and moon by reference to astronomical computer programs, charts and almanacs. Diaries and some newspapers indicate lunar phases. However, astronomical computer programs provide the easiest means to acquire precise spatial data for these bodies. Always check the precise position of the moon at the time of a sighting if you note that it was full and the conditions of the sighting suggest such an explanation as a possibility.

I well recall one case where an elderly lady (who needed spectacles but was not wearing them) observed an orange spherical object hovering above her house with what she called "astronauts" moving about in front of it. These "astronauts" must have been optical effects due to her eyesight, the fact that she had stared at the bright light for some time (if you try it you will see how quickly you get spots before your eyes - and imagination can play funny tricks on spots - ask any psychiatrist!) and also her conviction that she was seeing a UFO (which probably catalysed the imagination into turning the spots into "astronauts"). There is no doubt at all that what she did see was in fact the full moon!

Meteors

These are a highly important phenomenon for the ufologist to understand, as they give rise to many UFOs. They basically consist of pieces of rock or dust that enter the earth's atmosphere from space. Mostly they are no more than minute particles, which flare up briefly as they rub against the gases of the outer atmosphere and are heated to incandescence by the friction. They incinerate in a second, or perhaps two, and sometimes produce a spectacular streak of light in the sky, which can be seen if you happen to be looking at the right place at the right moment. At the time of a major shower - where the particles congregate in swarms and the earth moves through this - many meteors can be seen over the course of an hour. Since these swarms remain in the same place and the earth's orbit is regular we can accurately predict periods of meteor showers. (4) However, occasional meteors can be seen on any night.

Colours can vary, but they are usually white. An exceptionally bright meteor might leave a trail of luminous gas in its wake, and this will glow (faintly) for several seconds or even minutes after the meteor has vanished. Larger chunks of rock do sometimes enter the atmosphere - although fortunately those of the size depicted in the disaster film *Meteor* are exceedingly rare. These larger meteors provide most distinctive sights known as **fireballs** or **bolides**. Because of their size these take many seconds (up to about ten) to burn out as they pass across the sky, seemingly very slowly and in a horizontal mode. They look like a ball with a fiery tail and are usually orange or blue/green in colour. Their brightness is exceptional and they can even be seen in broad daylight, when smoke trails are often witnessed. A rumbling or whooshing sound has sometimes been noted, and an explosion seen or heard on termination of the bolide.

Naturally, truly brilliant bolides are rare, but every so often they are reported. Usually they are so spectacular that most people regard them as UFOs, and reports will flood into normal sources. At the time of writing the last really bright one seen from Britain was on 6 June 1976, but it is quite possible that by the time this has been published another will have appeared and given rise to hundreds of UFO sightings. (5)

Very rarely indeed is the meteor so large that even the intense frictional heat is not enough to disintegrate it. Bolides sometimes do break up into smaller pieces and the odd one or two may hit the earth. Such bodies that strike the earth, and leave an impact crater as testimony of their presence, are called **meteorites.**

Telltale signs: Very short duration (absolute maximum twenty seconds but usually around several seconds), appearance and colouration as described (usually very consistent) and, almost exclusively, a large number of witnesses over a wide area (up to several hundred square miles/kilometres). You should immediately suspect any phenomenon witnessed by dozens of people over a wide area - or even most of the country - as either a fireball meteor or a satellite re-entry (see later).

Finally, we need only mention in passing other astronomical phenomena. **Aurora** are beautiful curtains of light that are only visible from high latitudes. **Nova** are stars which explode and thus suddenly flare up (in most cases these explosions are so far away, and the light has taken so long to reach us, that they actually took place hundreds of years ago). One might just appear in the sky from one night to the next, but they are very rare - and even rarer still are those prominently visible to the naked eye. **Comets** are known as `hairy stars'. They are masses of dust and gas with a head and a huge gaseous tail that circle the sun in long orbits. Some return over a period such as Halley's Comet. They only move at stellar-like speeds, and so unless one is totally uninitiated are not likely to be mistaken.

We shall move on now to natural phenomena that occurs in our own atmosphere. These do not give rise to UFO sightings as often as the many astronomical wonders, but there are a few strange things you should know about.

Lightning

Ordinary lightning is familiar to most people. It is an electrical discharge from cloud to earth or cloud to cloud. The former is 'fork lightning' and is both common and dangerous. The latter is "sheet lightning' and can be seen from miles around when it seems to light up that whole part of the sky. All lightning flashes are very brief, of course. Believe it or not, sheet lightning has been misinterpreted as a UFO on at least one occasion I investigated.

One of the rarer forms of lightning is known as "ball lightning". We still do not fully understand its nature, and it seems that it is not absolutely necessary for

thunderstorms to be around and about when it occurs (although they most often are). (6) Here is a description which clearly illustrates its properties:

"A young teenager was walking to see his girlfriend one frosty autumn night in 1973. Approaching the main Manchester to Birmingham railway line at a bridge in rural Staffordshire he heard a buzzing noise, and looking up observed a blue ball of light about one third of a mile ahead and climbing down an embankment towards the railway bridge parapet. He stopped and watched in amazement as this fuzzy sphere (which he estimated as one foot in diameter when it came closer) followed all the contours of the landscape in its descent. It then climbed up and over the bridge and followed the course of the railway's overhead electricity wires, heading off at a moderate speed in a southerly direction. In all it was observed for about one and a half minutes. The weather was cold, but the skies clear and there were no local thunderstorms." (7)

One might easily be tempted to classify this as a "controlled" miniature UFO. In fact it classically illustrates most of the features of **ball lightning**. Following contours - or electrical sources - is common, but it can also move about erratically and explode with a pop or crack (or even silently). It is of course very dangerous indeed. It is normally spherical or oval, and blue or orange in colour. The size estimated in the above example is perhaps an upper limit, as is the duration. Size is no more than a few centimetres, and duration is normally but a few seconds.

Not surprisingly, from all these factors, it is very commonly regarded as a UFO. Indeed in some senses it still is a UFO, and it is by no means valueless to collect accounts of such observations. Scientists are interested in these stories, and **Nature** and **New Scientist** have carried reports of them.

Telltale signs: Spherical shape and colouration as described, very small size, characteristic motions, attractions to electrical or metallic sources, duration usually in the order of ten to thirty seconds (although up to about two minutes is known), probable existent weather conditions.

Clouds

These are, of course, very common things, and in Britain we are perhaps more familiar with them than most! However, there are two types that need to be considered since they are fairly unusual. **Lenticular clouds** are formed of domed layers and can look very much like the classical "domed disc" shape reported for supposedly metallic UFOs. This effect is enhanced because they are often lead grey in colour. They can occur singly or in groups (giving the appearance of a formation of discs). Naturally it ought to be a simple matter for most people to recognize them for what they are, but the interplay of perception and psychology can alter that. **Noctilucent clouds** are even stranger. They are visible at night and consist of ice and debris forming at a height of around 80 km. They often manifest as a "knotty" eerie white or pearly blue luminescent cloudy mass possibly covering a substantial expanse of the lower horizon.

Telltale signs: Motion drifting with the wind (although for noctilucent clouds especially wind speed and direction at great height may not be the same as on the

ground), cloud-like ability to alter shape, long duration of observation, no break in direction or speed of motion (except under unusual circumstances).

Whilst on this topic one might note that reflection of **ground lights** from clouds is also possible. At night the cloud might not be visible and a moving searchlight beam could give the appearance of a white oval object moving across the sky. Under some circumstances it is also known that moving car headlights can reflect from cloud surfaces (if the car is climbing a hill for example) and peculiar moving lights may be seen, usually as a group over a period of time rather than an isolated instance. Reference to a map, and the weather details (e.g. cloud heights) should serve to identify any possible sightings of such things. Unusually clear air will also be necessary.

Laser displays have become commonplace over the past two decades. They are now regularly used at big celebrations or public events (e.g. rock shows, festivals, opening of new clubs etc.). A computer controls the sequence of firing and rotation as powerful lasers beam skyward. These bounce off clouds to create oval/tadpole shapes which circle one another, swoop inward and perform a "sky dance". Alternatively, they can be perceived as a "dark spinning disc" with white lights "running around its edge", or as a rotating "ring" of many lights. They are so powerful you can see some of the display up to 50 km (30 miles) away if the prevailing cloud-base is fairly high; laser light shows located at Blackpool have been reported as "UFOs" in North Liverpool and Wigan! They may be visible for many hours, from about 7.00 pm to usually not later than 2.30 am the next morning and there will be likely dozens of reports which possibly re-occur over several nights.

Mirages

Mirages are formed by several different processes of optical reflection. Most commonly, changes in temperature cause light rays to bend as they pass through the atmosphere since the `angle of refraction' is different according to the density, and therefore the temperature, of the air. A similar effect is seen if a pencil is placed in a glass of water. The pencil `bends' because light rays are refracted at different angles in air and in water.

One may also notice a mirage on a hot, sunny day when one sees what seems to be a pool of water on the road ahead. In fact this is refracted light from the sky caused by the air just above the road surface being much warmer than the surrounding air.

It is possible for a meteorological effect known as *Temperature Inversion* to occur. This involves a similar process, but in the sky itself. What this can do is to refract a moving or stationary ground light into the air (e.g. car headlights) providing the illusion of a UFO streaking across the sky. It can also cause stars to move appreciably as they pass through an inversion layer. (8)

Whilst it is known that some UFO events are attributable to such factors, this is by no means as common as some debunking writers would have one believe. It has been postulated that many significant UFO reports are explicable as mirages of astronomical bodies, but this remains a highly controversial theory (which some feel seemingly represents a contradiction of the presently-accepted laws of optical and atmospheric physics)! (9). Nonetheless, it is a good idea to use an astronomical program to check to determine whether any of the stars and/or planets cited earlier in this chapter were present near (or just below), the horizon - even in cases where such a cause seems unlikely. Refractive effects can only occur within fourteen degrees of the horizon, and full-scale mirages within one or two degrees above (and below) it. Flat landscape conditions are desirable, plus little atmospheric turbulence. An inversion layer can commence suddenly, and an image so caused can thus appear and disappear with great rapidity. For example, movement of either the witness or the primary light source could lead to this. If both remain stationary then the inversion image might remain visible for protracted periods, if the conditions remain stable in the atmosphere. Your meteorological office will, if you check fast enough, be able to advise on possible inversion layers that might have existed. Of course it has to be said that such layers are more common during periods of warm, stable weather, and that they are a relatively rare source of UFO reports.

Telltale signs: Proximity of image to the horizon line, ability of image to appear and disappear if witness alters his location, possible `scintillation' effects (like stars wavering or changing colour on the horizon line). Weather reports mentioning the presence of inversions and/or a weather front moving over the locus around time of sighting may also be significant.

Next we turn to the world of airborne material objects - which is what many people argue UFOs are. There is, however, no justification (in a strict sense) for such an assumption at this stage. Later we will look at man-made phenomena, but for the time being will concentrate on natural things (both animate and inanimate).

Birds

These are a common sight in the skies of most countries, and there are few circumstances where misinterpretation as a UFO is plausible. However, this can, and has, occurred. Some birds have highly reflective under-surfaces and in bright sunlight can, if they are very high, appear as white shiny ovals or discs which may occasionally appear to "flicker" or "flash" on occasion. Similarly, at night time it has been known for street-lighting to be reflected from their underbellies - giving a characteristic colour (orange/yellow in areas of sodium lighting and blue/green in areas of mercury vapour systems). One of the most famous movie films ever taken of UFOs is provisionally explained by Blue Book and the Condon report as "soaring seagulls". Whilst there are those who disagree, and Hynek well illustrates these points of disagreement, the hypothesis seems to me quite valid. (10)

The case concerns a serving officer and his wife and family. On 2 July 1952 they were driving close to Tremonton, Utah, USA, when they observed strange disc-like objects milling about the sky in random fashion. Getting out of the car, they watched in the bright sunlight as this procession of objects moved east to west. Seventy-five seconds of movie film was taken. Motions were random, but in an overall direction, until one object left the other dozen or so and headed away in the opposite direction. The last seconds of film focuses on this object. The film images only resolve as glowing white ovals which pulsate in light output. (11)

All the above facts are consistent with the behaviour of a flock of birds riding air currents. In Britain we have had several similar observations, and I have investigated a couple of incidents that to my satisfaction proved to be reflections off birds (even one photographic case which proved to be a fast-moving seagull).

Telltale signs: Usually a formation of objects, random "milling" around motions (as with birds in flight), flickering of light output (as wings flap or reflected light varies).

Gases

These are amorphous vapoury emissions that can be given off at various locations. Examples are sewage works, marshland or chemical complexes. On page 89 there is an illustration of how one such emission was possibly misinterpreted.

Telltale signs: Cloudy outline, possible change of shape, drifting with the wind, potential source discoverable in the locality.

Clouds of insects have also been witnessed and give a similar kind of illusion, except that they are invariably grey or black. They may also make a faint humming or buzzing sound. Often the "cloud" will be seen to consist of tiny specks. At night some insects do emit light (bioluminescence) and it is now being considered plausible that some of the glowing oval-shaped masses seen at night might well be insect swarms. Whilst some sources have taken this to an extreme, and it cannot be argued that it explains all UFOs away, it is still a source to be contemplated. (12)

Wind-Borne Objects

This category can consist of ordinary debris (plastic bags, litter etc.) or various forms of kite. I recall one specific instance of observing a kite myself. My former fiancé and I had gone to spend a holiday with my brother and his wife in July 1977. They lived close to the North Wales coast and we were met by them at Rhyl station one sunny evening. Walking along the sea front we all caught sight of a small, dark triangular object hovering over the sea. We walked towards it discussing what it could be (although we had a fair idea). Every now and again it swayed from side to side. We had, of course, suspected it was a kite, although we had no view of anyone holding it. It was only after some minutes, when we were very close, that we could see it was obviously a kite. It would have been easy for someone unacquainted to get the wrong

idea, especially had they turned off the coast road before reaching it or had the kite been suddenly taken down by its owner.

Telltale signs: Motion with the wind (if debris), buffeting or rocking (if stabilized as a kite), relatively low height (only small debris will be taken quite high and will therefore be too small to be seen), relatively small size.

Our final main IFO category is that of man-made airborne objects. This consists of several major and very important sources of misidentification, and it is regarded as a prime factor in the modern upsurge in UFO sightings that these are themselves modern phenomena.

Aircraft

These are undoubtedly the most common source in this section. Almost everywhere one goes one can potentially see aircraft since aerodromes are dotted about all over the country (see **Figure 8**). There are, of course, numerous different types of such vehicles and we must consider five main ones: ordinary aircraft, military aircraft, advertising planes, gliders, and helicopters. Each has different aspects of relevance to the ufologist.

Aircraft can be interpreted as UFOs under many circumstances, day and night. In daytime it is quite possible for strong sunlight to reflect from the polished metallic surface and give an appearance of an oval or cigar-shaped object. Protuberances, such as wings, can be made invisible by this. Daylight aircraft approaching along a witnesses' line-of-sight can also appear as a stationary "domed-disc" for several minutes. Aircraft types vary widely and yet they all have a standardized appearance. Nonetheless, under certain conditions any aircraft can look extraordinary, especially if the witness hears no sound. Some modern jets are quiet, and if a fairly strong wind is blowing away from the witness and towards the aircraft then it could appear to be silent.

At night, aircraft are illuminated for reasons of air safety. The forms of navigation lighting they employ are universally adhered to throughout the world, albeit with some degree of flexibility. By law, an airborne aircraft must bear a steady red light on its left side, and a steady green light on its right (positioned on the wingtips in the case of an airplane). Additionally, they often also bear strobe and/or static white lights (again, in regards to airplanes, on each wing). A reddish/orange flashing anticollision beacon is mounted on the centre of the aircraft's upper and lower fuselage. Finally, the tail may bear a steady white light, in addition to any other lumination (as described below). Due to these combinations it is possible for a witness to describe all manner of coloured lights. Under certain conditions green can look blue, red can look yellow, and so on. Consequently it is not that important whether or not the lights described conform to the expected aircraft navigation lighting. If the object described

by the witness performs as an aircraft would perform then one might conclude this is a feasible explanation.

There are three other aspects of aircraft lighting that must be considered. Firstly, the searchlight. Some aircraft do employ these for ground illumination. Condon gives us an impressive account of a group of people who were out hunting and observed a gliding UFO that swooped down low and enveloped them in a beam of light. Despite their rather confused descriptions this was identified as a small aircraft which had spotted their torchlights and come down to investigate (13).

Such bright searchlights are also employed at the front of aircraft as landing lights. Although meant only for the final stages of landing, if traffic is light (or conditions are notably foggy) aircraft do switch these on kilometres from touchdown. The sight presented by one of these is spectacular – a single (or two adjacent) brilliant ball(s) of white or yellowish light. If travelling directly towards you it can be seen from many kilometres away, and will appear virtually stationary for up to several minutes. In all probability it will also be quite silent at that distance.

We came across the second unusual lighting system previously in Chapter 2. **Strobe lighting** is becoming more popular nowadays and consists of regular brief flashes of extreme intensity (like a photographic flashgun). It can be seen from some distance, which is one of its chief advantages, but due to its brilliance can lead the eye to see strange motions and shapes not present in reality. Many commercial jets now also use steady white "Logo Lights". These allow the airline's symbol, usually on the tail fin, to be visible. Since all manner of symbols are used the world over nobody should be alarmed if flying dragons or fiery lions are seen crossing the sky behind an aircraft!

In order to generate temporary bursts of speed military jet fighter aircraft are equipped with "afterburners" or "reheat" capability. When activated they may be perceived as a rotating or flicking fiery orange ball or dome sometimes making a "roaring" sound that may vanish suddenly. Their use may be witnessed over a wide area for upto 10 minutes (often less). A similar effect - "dump and burn" - can be generated by aircraft dumping fuel and subsequently igniting it with their engines.

This situation is further complicated by the tendency of witnesses to perceive darkened spurious shapes within a configuration of aircraft navigation lights. This is identical to the effect discussed in relation to the COSMOS 1068 sightings discussed earlier (triangular forms being especially common).

It should by now be very apparent that there are so many factors involved in aircraft observation that multiplicities of possible misidentifications exist. Fortunately, it can be a simple matter to confirm or disprove the existence of a civil aircraft in any vicinity at a specific time, provided checks are made fast enough with local airports. There are also standard airways (termed **air corridors**) along which an aircraft en



Figure 8: Location map showing major civil airports in the U.K.

route must travel. Their location can be checked by reference to major civil airports, and local aviation clubs can supply you with up-to-date maps of these corridors around your area, together with information such as maximum and minimum flying heights allowed along them. There is certainly some justification for checking aircraft movements on every case where this is possible.

Military aircraft present more problems. Civil airports may know of flights or exercises in their airspace, but it is by no means impossible that they would not. One can check with the nearest military base and they may or may not be co-operative. A great deal depends on the nature of the operation involved. Such aircraft can, of course, fly much faster than civil aircraft, and they sometimes fly in formations. This is true of "refuelling missions", where one aircraft is fuelled in-flight by another. It is speculated that some stories of "mother ships" and their "baby" UFOs are attributable to the tanker aircraft and one or several smaller jets being refuelled.

Fortunately, there are not many **advertising aircraft** in Britain at the moment, although they are very popular in the USA. Undoubtedly they will become more widespread in the future. To date, a small number of **advertising airships** (such as the *Virgin Lightship*) have been used in U.K airspace from the late 1980's onwards. In any event, such aerial advertising utilise either an aircraft with the capability to fly extremely slow equipped with hundreds of lights on the underside, or an airship with a similar array of lights along its sides. These can be lit up in various sequences to spell out advertising messages and the effect can be remarkable. However, when viewed from a distance and at a shallow angle all that is seen is a random pattern of lights that may change or pulsate. Experience in the USA with advertising aircraft has taught that witnesses will read many exotic UFO shapes into these with ease (often perceiving them as a rotating "domed disc") (14).

Gliders are not flown at night since they would be too dangerous, but in daylight they may look somewhat odd when seen from a distance, and of course there is no sound associated with them.

Then there are **helicopters.** While infrequently conducted until the 1990's, night time flying is now becoming increasingly common due to advances in avionics and night vision technology, especially in regard to the military. As with aircraft they are equipped with both a searchlight and navigation lights. Their more notable attributes are manoeuvrability, (much more pronounced than an aircraft, especially during daylight), a lower operational ceiling, generally slower speeds and an ability to hover for extended periods of time. Naturally, sightings of helicopters can be very puzzling (especially at night). An example was given at the beginning of this chapter - and that fooled me for a time!

The unfortunate thing about aircraft is that it is not always possible to prove that one was in an area, even if one does check right away. Aircraft details are often logged by

an airport and you may be able to discover that one was heading inwards (or outwards) from (or to) a certain place, and would pass by the sighting location at a reasonably precise time. If the witness does not claim to have seen this aircraft (when it seems he ought to have done) then one immediately proposes a misidentification. However, many airports now ask for substantial search fees to acquire such data, and the present security situation may make them hesitant to supply it in any event, especially to a person previously unknown to them. Another (cheaper) option is to check online flight schedules to determine if any aircraft may have been in the vicinity during the sighting – knowledge of local air corridors and orientations of local airport runways in regard to a "suspect" flight being essential for this approach to be viable. Whatever the method, if one has not traced an aircraft then one must not dismiss the possibility that one was in fact seen. If, in your opinion, the balance of evidence indicates that an aircraft is a likely suspect then it is best to term the case identified as a "Probable Aircraft".

Telltale signs: Flashing lights (at night), steady speeds (between about 100 and 600 mph), vicinity of an airport or airway, possible droning or whining sound. Duration usually around 2 minutes up to half an hour.

The last type to consider are **UAVs** (or *Unmanned Aerial Vehicles*). Once confined to battlefield and military exercise areas, UAVs are increasingly being used by civilian bodies such as the Police and County Councils for surveillance and similar duties. They are not "robotic" aircraft in the true sense but remotely operated by a ground controller located a relatively short distance away. Most utilise airframes resembling a combination of a missile, model aircraft and/or a helicopter (with some military versions incorporating angular radar stealth "streamlining"). Disc shapes and flying wing designs also exist but are deployed less often. Presently, the optimum size of a UAV is around 15-40 cm or more – smaller variations having very low operational ranges. Larger UAVs, on the other hand, can have an endurance of 2 days or more. The majority utilise fairly quiet propellers or ducted fans for propulsion. While relatively slow many are capable of hovering (especially those with helicopter configurations) and all have excellent agility. Operational heights tend to be fairly low, and civilian models tend to be used during the day only in ideal weather conditions (i.e. no strong winds, heavy rain or fog). (15)

Tell-tell signs: A small oval, glider or "rocket" shaped object performing agile motions (with occasional static periods) over a significant public event (rally, football match, etc.), urban area or military exercise/proving ground. The presence of a police surveillance van or similar vehicle may also be noted in the area.

Over the past 50 years there have been several attempts to develop a **flying car**, mostly without success. Several prototype designs utilise discoid or lifting-body forms with VTOL capability (albeit with low operating ceilings and mobility in comparison with aircraft). While commercial versions have yet to be marketed -

despite decades of development - they nonetheless represent a potential generator of future IFO reports.

Satellites

These are man-made objects launched into space and orbiting at various heights and speeds many kilometres above the atmosphere. They are used for many purposes, such as telecommunication links between centres of population, or weather mapping. Satellites can only be observed as lights in the night sky. Some are very bright and prominent, but most of the many hundreds that are visible are dim and would only be noticed by a sharp-eyed observer in dark surroundings. They are white, but can take on colour tinges if seen through thin cloud or smoke. Their speed takes them across a reasonable arc of sky in several minutes (up to 20 minutes) and so is noticeable, even to a casual observer. Light reflecting off the antennas of **Iridium** communication satellites can produce very intense flashes (at magnitude –7 or more) lasting several seconds, which can be predicted for specific dates and locations (16).

There are one or two problems that have to be considered here. One is the question of *Autostasis*, similar to *Autokinesis* (as referred to in the section about stars). It causes the continuously moving satellite to appear to hover or even to have a jerky motion. Overall it will continue its sweeping arc and cannot alter direction, and so the effect is detectable. The other important feature is the sudden disappearance of a satellite as it enters the earth's shadow in space. Since the light we see is that reflected off the shiny surface of the satellite by the sun (which is beyond the earth so far as the satellite is concerned) there comes a point where the sun disappears, relative to the satellite, as it passes out of sight behind the earth. Hence the satellite enters shadow and its light cuts off dramatically. Most observations of steady white lights on continuous tracks are probably satellites. As stated in the previous chapter, while it is possible (with modern computer technology) to track down a likely culprit (17), it is not really worth your time doing so. In those instances where this solution is consistent with the sighting account the case should be written off as a "Probable Satellite".

Telltale signs: Steady motion in continuous arc (despite apparent `wavers' or `jerks'), steady whitish light (slight pulsations are possible if the satellite surface is uneven and it is rotating), observation time in the order of 2-20 minutes.

No satellites are visible during daylight (other than flashes from Iridium satellites under rarefied circumstances) but if a satellite orbit decays it comes closer and closer to earth and eventually re-enters the atmosphere. This can be seen day or night. Like meteors, **satellite re-entries** burn up due to friction as they enter the gaseous envelope. Since they are a relatively large size and also have some heat-resistant parts this burn-up is longer lasting and more spectacular. Various colours are possible due to the different elements in the make-up of the satellite. A vivid light display, often like a train of lights or a railway carriage, is produced; this book having previously cited descriptions generated by the re-entry of COSMOS 1068's booster rocket in

1978 (pp 41-42). The telltale signs for the meteor are all relevant to satellite re-entries except that duration can last up to two or three minutes, giving the appearance of a slow moving, possibly burning, aircraft which is crossing the sky.

In July 1979 one of the most famous of all satellites, the American **Skylab**, re-entered our atmosphere. Since it was so large and scientists had little control over its descent there were great fears that it would not burn up completely. Those out to make a quick-sell persuaded some people to buy tin hats to protect them from Skylab's fall! They would, of course, have been totally useless had, by some remote chance, a piece of the satellite fallen on someone's head. As it was, Skylab crashed into the Australian desert - or at least the few parts of it which survived the burn-up did. People all over Western Australia were treated to the amazing sight as it came down, and some good film was taken - illustrating just how odd these re-entries can look.

Telltale signs: Observations at numerous locations over a very wide area, describing a cigar/disc with luminous windows (otherwise a trail of glowing objects) emitting a trail, traversing a slow level or curving path. Duration can be up to 3 minutes.

Balloons

Weather Balloons are another very common cause for UFO sightings. Several types are released from centres all over the world. Some are small and just test wind direction. Others have complex instrument packages on them, and drift high in the atmosphere performing experiments. It is the latter that appear to generate the majority of spurious UFO reports. Such high-flying balloons are visible in daylight due to their reflective surfaces. In sunlight they will look silvery. Against a cloudy background they may look grey or dark. Naturally they drift with the wind (although wind direction at height may not be the same as on the ground). Usually they are clearly identifiable by their small round shape, but if seen closer to the ground they may be triangular or conical. Their motions tend to be exceedingly slow. One such balloon was observed by me for about an hour in Ibiza, Spain. During this time, looking like a bright star in a sunny sky, it only covered about forty-five degrees of arc. Problems can arise when a balloon becomes caught in a thermal updraft. It may seem to change direction suddenly and dramatically. Very few balloons carry navigation lights, but some do if they are likely to cross airways at night.

To identify a balloon it is necessary to find out whether one was launched at a centre downwind of the sighting location, and of course to have full records of the wind velocity and direction at various heights. The centre that launched the balloon can usually help confirm whether or not one was likely to be visible over a certain position at a certain time; a radiosonde being capable of travelling upto 125 miles (200 km) from its launch-site. It can be fun plotting the course and times on a map and estimating time of arrival at the sighting location. These balloons are initially around of 6-8 feet (1.80 – 2.40 metres) in diameter, expanding to 30-35 feet (9.00-10.5 metres) at `burst' height. 'Burst' height is the height at which expansion due to decreasing air pressure causes the balloon to burst. This is normally between 60,000

and 115,000 feet (18,300 – 35,000 metres). The rate of ascent of these balloons is approximately 1,200 feet (366 metres) a minute, giving a normal lifetime for each balloon of around 1-2 hours. At present there are six sites in the U.K that launch radiosonde balloons (daily at midday and midnight UTC): two manned stations at Camborne, Cornwall and Lerwick, Northern Scotland, along with four unmanned sites (launching balloons automatically) at Herstmonceux, East Sussex, Watnall Nottingham, Albermarle N.E England and Castor Bay, Northern Ireland. In addition, unscheduled launches and tests by universities and such like must also be considered. The larger research balloons, unfortunately, also fall into this category. Local airports will probably have been informed of these due to potential dangers to aircraft, hence it is always sensible to check with them.

In recent years **luminated paper Sky Lantern balloons** (sometimes known as **Khoom Fay, Khom Loy** or **Kung Ming**) have become popular for parties and other social functions. These often appear as clusters of lights, usually orange in hue, rising from the ground and drifting with the wind, eventually vanishing as they burn up. In many ways they are similar to the so-called "**fire balloons**" – home made versions composed of transparent laundry sacks containing a heat source to generate lift (and light). In either case they are often described as resembling a luminous (usually) orange-hued rugby ball or sphere with a duration of up to 12-15 minutes and can attain an altitude of about 1 mile (1.6 km). Sometimes they may drop vertical "sparks" as the heat source consumes the balloon fabric.

Small **disc-shaped helium balloons**, up to one foot (30 cm) in diameter and coloured silver on one half and dark on the other, have instigated a significant quantity of "UFO" reports since the early 1980's. These tend to be seen at fairly low elevation drifting with the prevailing ground-level wind. If perceived as a largish object some distance from the observer they will be reported as moving relatively fast. As these are often sold at fetes it may be useful for investigators to check whether such an event occurred downwind of the observer.

Solar Balloons are large dark tubular shaped balloons composed of very thin black plastic usually around 8 metres long. They are inflated by wafting air inside the fabric and then sealing the open end; exposure to ambient sunlight warming the air within it being sufficient to generate lift. They are usually only flown during cool, sunny days with little or no wind. While normally tethered, they can sometimes escape their owner's grasp; thereafter capable of reaching high altitudes (upto 9,000 metres (30,000 feet)) and drifting hundreds of kilometres from their point of origin. A Solar balloon can be perceived as a large dark vertical tube/cigar shaped "UFO" with rounded ends, often exhibiting a repeated slow "sew-saw" tumbling motion. However, they can be "bespoke made" from thin bin-liners - hence disc, tetrahedral and other (even exotic) shaped solar balloons are possible.

Telltale signs: Slow drifting motion with the wind. In regards to high attitude research weather balloons a long duration of observation and multiple witnesses (possibly over an extensive area over a period of many hours).

Rocket Launches

Rockets are sometimes launched to conduct experiments instead of balloons. These are rare in the U.K, and usually publicized in advance. Again, local airports will almost certainly be advised, but the rocket can go kilometres into the atmosphere and so be seen from a very wide area. Experiments in the upper atmosphere often involve the release of a cloud of vapour which can be luminous. This glowing mass has, on occasion, been widely reported as a UFO. (18)

Telltale signs: Slow drifting motion, possible long duration of observation, multiple witnesses (over a wide area).

Flares

Finally we can refer to flares, which are often used by military establishments or searescue facilities. The local police should be informed if any other flare releases are likely. They streak into the sky like a firework rocket and burst into colourful flares of light that slowly dissolve away. Colours can be red or orange, although others are possible. Military flares can be quite different; they are often white or green. They may be of longer duration (up to several minutes) and attached to parachutes so that they spiral slowly downwards illuminating the sky around them.

Telltale signs: Short duration (usually just several seconds), characteristic appearance, presence of body in area likely to utilize flares (e.g. military bases).

UAPs

We conclude with a brief overview of various reputed forms of so-called **plasma** phenomena, cited by some as a possible explanation for otherwise inexplicable "UFO" reports. There is considerable uncertainty surrounding this issue – even as to whether such plasmas actually exist! They are sometimes referred as **UAPs** (**Unidentified Aerial Phenomena**), although this expression was originally only intended as a more neutral alternative to the term "UFO".

Whatever its reputed origin, a UAP is generally believed to consist of fluoresced, energised air somehow capable of assuming a spherical or other form. Seemingly artificial surface features could result from the same perceptional effects responsible for creating the illusory shapes associated with some conventional IFOs (a factor which appeared in some of the COSMOS 1068 satellite re-entry reports discussed previously). It is further claimed they may emit radio waves, microwaves, infrared or ultra violet radiation; resulting in various secondary effects ranging from vehicle interference, radio static through to physiological symptoms on people and animals.

There is presently **no** consensus how such phenomena could be generated, with various man-made, natural and geophysical mechanisms being proposed to date. One theory postulates earthfaults can generate luminous phenomena (termed **earthlights**) and/or consciousness-altering electromagnetic emissions, instigated by relatively low levels of seismic stress (19). Another theory proposes man-made electromagnetic emissions from electrical pylons, electrical sub-stations, radio and microwave transmitters are possibly responsible – especially within areas prone to their concentration termed **hotspots** (20). A further theory proposes the existence of a "UAP" related to tornadoes termed a **plasma vortex** (21).

Again, it must be stressed the existence of such UAPs is only hypothetical and have yet to be demonstrated convincingly, and that the validity of all these various plasma theories have been severely criticised (22). The existence of ball lightning, however, infers this possibility is also a real one. While the debate over the existence of "plasmas" is ongoing and presently unresolved, they are nonetheless worth considering as a possible solution in cases where other conventional explanations appear inadequate. Obviously, it is difficult to summarise such complex ideas in only a page or so – nonetheless, the "tell-tell signs" section below attempts to encapsulate the more notable **reputed** attributes of these various hypothetical phenomena. Only future work can eventually invalidate, refine or vindicate the existence of plasmas - a task that may one day be facilitated by the reader!

Telltale signs:

Possible geophysical plasmas – An otherwise inexplicable UFO observed in close proximity to an earth fault a short time before, after or during a detected seismic disturbance, especially within an area with a history of "mysterious" lights. Some commentators believe earthlight generation may also involve the interrelation of other phenomena, i.e. the earth's magnetic field, a weather front passing over the affected area, etc.

Possible artificial plasmas – An otherwise inexplicable UFO seen in very close proximity to electrical pylons, electrical sub-stations, radio and microwave transmitters. Sighting area possibly prone to notable and frequent malfunctions of electrical devices and allergy-like symptoms among some of those living there.

Possible plasma vortexes – An otherwise inexplicable UFO resembling a rotating luminous mass with tornado-like attributes. Association with anomalous weather conditions likely to favour tornado generation and other related conditions (heat waves, encroaching weather fronts, build-up of atmospheric electricity, magnetic fluctuations, etc.).

To conclude, this summary of significant IFO types is not meant to be exhaustive. From time to time you will come across a case that you can crack only if you put enough effort into it. This may well have defied all the possibilities you have come to expect. Such freak explanations must always be contemplated and represent another aspect of the flexibility a ufologist must adopt.

On 16 August 1976 a strange orange ball of light was seen by a group of witnesses at Holcombe, Lancashire. They watched it pulsating for over an hour in a stationary (and allegedly landed) position and then left it. No normal explanation (such as a bright star or planet) seemed practical, but investigators did not give up. After checking the site and estimates of elevation made by the witnesses it was found highly probable that the object had been on the side of a nearby hill. Its outline had been invisible in the dark. Checks with local farms soon discovered that there had been a fire at one of them that night and that this was in fact what had been seen. The wind had carried away any sounds or smells. Through perseverance and flexibility another UFO riddle was solved.

To give some idea of the relative proportion of misidentifications we can turn to data from the NUFON files for the years 1976 and 1977, relating to UFO activity in the Midlands and the north of Britain:

Total Reports: 482. Unknown (TRUE UFO): **86** (**17.84%**), Insufficient data for valid judgement: **145** (**30.08%**), IFOs: **251** (**52.08%**).

IFO Judgements:

Aircraft: 72 Fungoid growth on the ground: 1 Powerline discharge: 1
Airship: 2 Gases: 4 Psychological: 1

Balloon: 18 Hoax: 10 Reflected ground light: 2

Birds: 5 Kite: 1 Satellites: 28

Clouds: 2 Meteor: 41 Stars and Planets: 32

Fire: 2 Meteorological (e.g. ball lightning): 13 Wind debris: 1

Film defect: 2 Model aircraft: 1

Flare: 6 Optical (e.g. mirage): 6

The high percentage of **TRUE UFOs** (approximately 18%) was due to a major wave of close encounter cases in Britain in spring 1977. The figure is normally closer to 10%. I will close this section with some thoughts by Allan Hendry, who conducted an in-depth investigation of UFOs during the late 1970's, later summarised in his benchmark work **The UFO Handbook**. (24)

An emotional climate publicly surrounds the subject, one that favours the existence of a certain model of UFO and the desirability of finding one! It doesn't affect an isolated fringe group, either; it obscures the objective judgement (on this issue alone) of all of those typical, ordinary individuals, young and old, of all occupations that are reporting these IFOs as UFOs, and are reporting them poorly. He rightly continues to state that we must be ruthless and only accept a report as a TRUE UFO if all else has failed: Indeed the fact that the accepted identity of a given UFO is dependent upon the success of a pro and con debate is a perfect example of the tenuous state of the whole field. The existence of a chair, a bird, or a brick is not contingent upon a battle between "the defence and the prosecution". Thus, the tough standards. (25)

Without doubt we must be rigorous and conduct every investigation as if it were of the most vital significance. Tomorrow will be too late. If you are ever going to solve a particular UFO sighting, or provide significant evidence that it is a true unknown, then the work has to be done by you - and it has to be done today.

Investigator Resources:

Astronomical Phenomena:

Teach Yourself Astronomy (Teach Yourself Science) Sir Patrick Moore. Teach Yourself Books, U.K 2003. The Cambridge Encyclopaedia of Amateur Astronomy, Bakich, M Cambridge University Press, 2003. Norton's Star Atlas and Reference Handbook Ian Ridpath Addison Wesley, U.K, 2003.

Stargazing with Binoculars Robin Scagell and David Frydman. Philip's, 2007.

Philip's Planisphere: Northern 51.5 Degrees - British Isles, Northern Europe Northern USA and Canada Philip's 2005 (a useful, inexpensive tool to determine the general appearance of the night sky in regard to stars only for any date and time of the year).

Redshift Focus Multimedia Ltd. A highly recommended astronomical computer program – new editions issued frequently.

Satellite location details can found at: www.heavens-above.com and

http://science.nasa.gov/Realtime/jtrack/3d/JTrack3D.html

Atmospheric Phenomena:

Ball Lightning:

The following two works relating to Ball lightning are very expensive and difficult to get hold of, but reasonably-priced second hand copies can be found:

Ball Lightning and Bead Lightning: Extreme Forms of Atmospheric Electricity. Barry, J.; Plenum Publishers, 2001 Ball Lightning: An Unsolved Problem in Atmospheric Physics. Stenhoff, M. Plenum Publishers, 1999.

Earthquake Lights:

British Geological Survey website: http://www.earthquakes.bgs.ac.uk/ (lists recent UK earth tremors).

Aviation Resources:

The most accessible maps of British airspace are the "VFR" (visual flight rules) charts produced by the CAA (Central Aviation Authority), depicting flight control areas and other similar zones upto "FL195". The 1:500,000 scale editions cover British airspace in three sheets: "Northern Ireland and Northern England", "Scotland, Orkney and Sheltland" and "Southern England and Wales". The 1:250,000 scale editions depict the same regions (albeit in greater detail) via five sheets; "The Borders", "Central England and Wales", "England East", "West and South Wales" and "England South". In 2007 they cost around double the price of a standard OS 1:25 000 map. Current suppliers of these maps are given on the CAA website (http://www.caa.co.uk/charts); which also lists supplementary data and updates relating to the above.

Other resources include:

Military low flying info (Times of RAF training flights):

http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/AirSafetyandAviationPublications/MilitaryLowFlying/OperationalLowFlyingTrainingTimetable.htm

NOTAMS – changes to previously-stated flight operational data - and other aviation information available (free registration required) from: http://www.ais.org.uk/

Meteorology:

Atmosphere, Weather and Climate: Barry R., Chorley, R., Chase, T. Routledge, 2003 Color and Light in Nature. Lynch, D and Livingstone, W. Cambridge University Press, 2001. Light and Colour in the Open Air: Minnaert, M., Dover Publications, New York, 1973

Factsheets dealing with various aspects of meteorology (clouds, thunderstorms, weather fronts, etc.) can be found at: http://www.metoffice.gov.uk/corporate/library/factsheets/ .

Details of U.K upper atmospheric winds can be found at http://weather.uwyo.edu/upperair/sounding.html

General References:

The UFO Handbook: Hendry, A., Doubleday, USA, 1979, and Sphere, London, 1980 (Overview of IFO and UFO reports received by the Centre of UFO Studies during the late 1970's, which contains detailed descriptions of the former. Long out of print but strongly recommended)

The Scientific Study of Unidentified Flying Objects. (Dr. E. U. Condon., ed.) New York Times book, USA, 1968. Long out of print, but presently available at: http://www.ncas.org/condon/

Note Section 6: Chapter 1 (Perceptual Problems), Chapter 2 (Processes of Perception, Conception and Reporting), Chapter 3 (Psychological Aspects of UFO Reports), Chapter 4 (Mirages), Chapter 7 (plasmas) & Chapter 8 (Balloons).

References:

- 1. Scientific Study of UFOs, Condon, Dr E.U., Bantam Books, USA, 1969, Case 15, p. 290
- 2. In fact this is not strictly true. Stars do move relative to one another, but the time scale is in the order of centuries, and so for our purposes we can assume that they do not.
- 3. UFOs: A British Viewpoint, Randles, J. & Warrington, P., Hale, UK, 1979, p. 45
- 4. Dates of meteor showers are given in many astronomical almanacs. Two of the brightest showers are the PERSEIDS (July 25 August 18) and the GEMINIDS (December 7-15) each year.
- 5. UFOs: A British Viewpoint, pp 61-63. See also New Scientist, Vol. 72, p. 695 (1976). Article by Hindley, Dr K.
- 6. The Nature of Ball Lightning, Singer, S. (Ed.), Plenum, USA, 1971
- 7. Northern Ufology, No. 59, April 1979, p. 8
- 8. Scientific Study of UFOs, Condon, Dr E.U., Bantam Books, USA, 1969, pp 651-653, `Optical Mirage' by Viezee, W. 9. The UFO Mystery: Solved. Campbell, S. Explicit books, Scotland, 1994 details the author's theory that many classic UFO events were generated by astronomical mirages of this kind.
- 10. The Hynek UFO Report, pp 235-239
- 11. Scientific Study of UFOs, Condon, Dr E.U., Bantam Books, USA, 1969, Case 49, pp 418-426
- 2. "The Spruce Budworm Connection", Creighton, G., FSR Vol. 25 No. 3, 1979
- 13. Scientific Study of UFOs, Condon, Dr E.U., Bantam Books, USA, 1969, Case 23, pp 324-326
- 14. The UFO Handbook, Hendry, A. 1980 (pp 31-35 and 91-96).
- 15. Books on this topic are rare (and notably expensive), but see Unmanned Air Vehicles: An Illustrated Study of UAVs, Holder, B. Schiffer Publishing Ltd (2002) Unmanned Air Vehicles: UAV Design, Development and Deployment, Austin, R. John Wiley & Sons, (2008) for further information.
- 16. Iridium flash predictions available (at the time of writing) from the website http://www.heavens-above.com
- 17. For example (at the time of writing) the NASA website http://science.nasa.gov/Realtime/jtrack/3d/JTrack3D.html
- 18. 'Phenomena on the Night of 7 September 1971', Fowler, 0., BUFORA Journal, Winter 1971
- 19. Earthlight Revelations: Devereux, P. Blandford, UK 1989. (A global overview of the "earthlights" phenomenon).
- 20. Electric UFOs, Budden, A. Blandford Books, 1998.
- 21. Crop Circles: A Mystery Solved Fuller, P and Randles, J. Robert Hale, 1993.
- 22. For example see Section 6, Chapter 7 (plasmas) of The Scientific Study of Unidentified Flying Objects, Condon., E. U (ed.) New York Times book, USA, 1968., Chris Rutkowski's 'UFOs as Natural Phenomena' In: Evans, H. & Spencer, J., eds. UFOs 1947-1987: The 40-year search for an explanation and Mauge, C. 'Persinger's Tectonic Strain Theory: Strengths and Weaknesses'. MAGONIA, no. 24, November 1986, pp. 13-18.
- 23. The UFO Handbook, Hendry, A., Doubleday, USA, 1979 and Sphere, London, 1980
- 24. `UFO or IFO? How IUR Draws the Distinction', Hendry, A., International UFO Reporter, July 1977

Things to do:

- 1. Take the opportunity to visit a major airport that operates night flights. Position yourself as close to the runway as you are allowed to go (for safety purposes) and observe aircraft taking off and landing at night. Familiarize yourself with the different lighting systems as seen from varying angles.
- 2. At the next bonfire night buy, but do not use, a spectacular but silent rocket. Keep it until an opportune time some months later and release it in the dark (keeping to all the standard safety precautions). Try to ensure that a number of people are likely to be around at the time (e.g. taking dogs for a walk). Next day casually mention to acquaintances that you saw a strange UFO the night before. See if you can find anyone who will describe it in odd terms because you say it was a UFO.

Nocturnal sightings - Common ifo candidates:

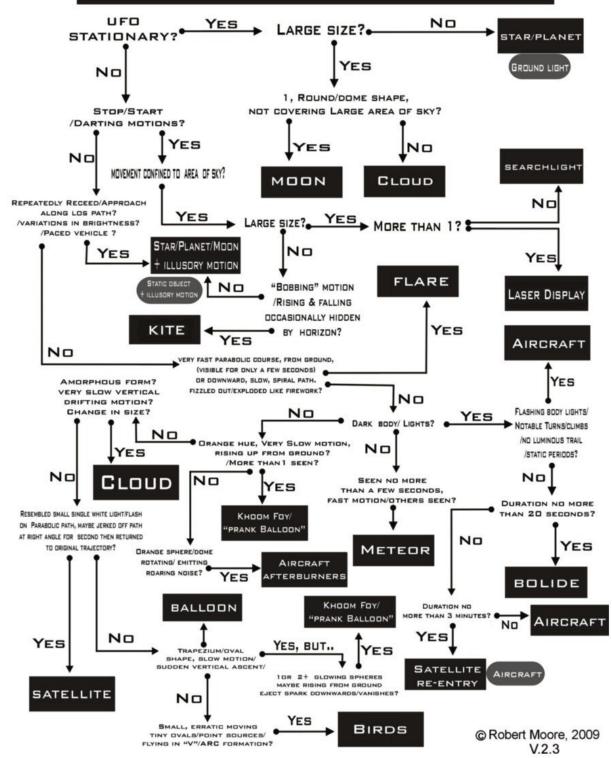


FIGURE 9: FLOWCHART DEPICTING COMMON NOCTURNAL IFO TYPES, BASED ON DESCRIBED ATTRIBUTES. DARK BLOCKS DEPICT MOST LIKELY, LIGHTER BOXES INDICATE POSSIBLE BUT LESS LIKELY CAUSES WHILE ROUNDED OBLONGS NOTABLY UNCOMMON OPTIONS.

DAYTIME SIGHTINGS - COMMON IFO CANDIDATES:

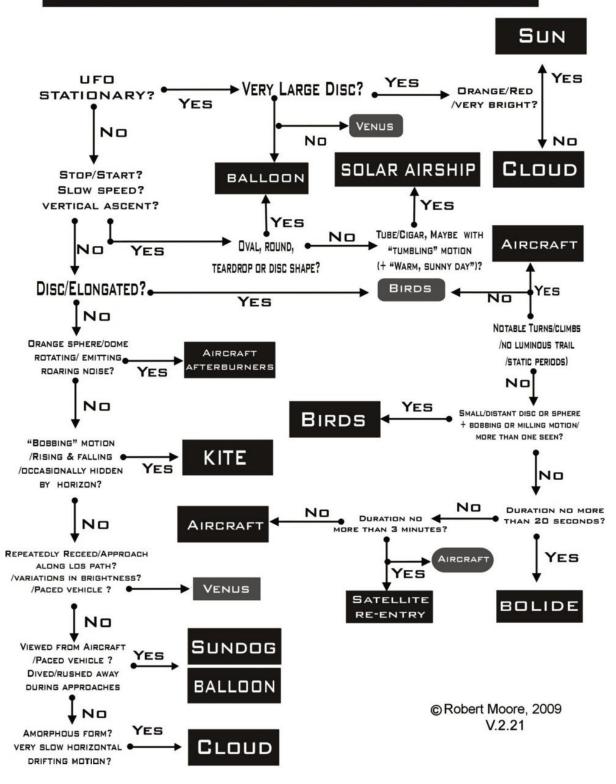


FIGURE 10: FLOWCHART DEPICTING COMMON DAYLIGHT IFO OPTIONS, BASED ON DESCRIBED ATTRIBUTES. DARK BLOCKS DEPICT MOST LIKELY, LIGHTER BOXES INDICATE POSSIBLE BUT LESS LIKELY CAUSES WHILE ROUNDED OBLONGS NOTABLY UNCOMMON OPTIONS. NOTE THE LOWER QUANTITY OF IFOS & OBSERVATIONAL COMPLICATIONS IN COMPARISON WITH FIG 9!

10: The Photographic Case

"The UFOs have a strong resemblance to light shades ... I cannot, and will not, accept that these are UFOs ... What a disappointment!" - An investigator's comments, after analysing a photographic claim (see picture section of this book)

Many people think that a photograph of a UFO is worth a hundred UFO reports (to paraphrase a popular saying). However, this is usually not the case – especially in regard to modern imagery technology! It is all too easy for the investigator to become entranced by the wonder of the "proof" before his eyes and lose all objectivity. Here is a stinging comment made by D.I. Simpson, who was part of a team responsible for an extraordinary photographic `experiment': "At no stage in its publicity campaign has FSR referred to an investigation of the photographer - the most important person, because without the photographs this would merely be another "light in the sky" report". (1)

The magazine Flying Saucer Review was not in fact to blame for this since, at the time, it had no investigatory unit linked with it. Nevertheless, the point remains valid. A photograph means nothing on its own. Yet often it can allow a very mundane event to be seen out of all proportion to reality. The total range of the evidence must be the basis for judgement - not just a portion of it.

The "experiment" just cited is highly controversial and, not surprisingly, FSR, who were singled out by chance to be the victims, were somewhat piqued when its nature was explained several years afterwards. Not being a UFO group they did not possess the facilities to tackle the case, as would such a body, and therefore the impact of the 'experiment' was diminished by the chance that the person who happened to get involved had a loose association with a magazine rather than a group. Nevertheless, ethics apart, there is some value in looking at what happened. Warminster, Wiltshire, was chosen in March 1970 as the focal point for the "experiment" by a group of people calling themselves the Society for the Investigation of UFO Phenomena (SIUFOP). They claim to have conducted other such tests, but no results of these have been published. Are we to presume, therefore, that they did not succeed or that ufologists are still party to such trickery?

Warminster in the mid 1970's was the ideal site because at that time there were many skywatchers there every night and, therefore, several ufologists would be expected to (and did) see the stimulus that SIUFOP set up. This was in fact a brilliant light on top of a car with a purple filter in front of it. Skywatchers observed this light switched on for five seconds, off for five seconds, and then on again for twenty-five seconds. The general belief of those present was that they had seen a UFO, which was exactly what the hoaxers wanted as they stealthily drove the car away to conceal the trick.

In a report to FSR John Ben referred to his personal sighting of the light in the following terms: "An object was seen at elevation of approximately 20 degrees in the eastern sky. The object appeared very suddenly, as if it came through clouds and appeared to the eye as a very bright ovoid light, purple in colour, with a periphery of white ... The object remained stationary for approximately 30 seconds during which time Mr Foxwell was able to take the first of his photographs. The object then moved slowly to the right - towards the town - and lost a little altitude in the process. At one stage in the movement it dimmed considerably as though obscured by low cloud. The object continued moving for about 20-30 seconds and then stopped again. The light then increased considerably in intensity, though we could not be sure if the object was moving directly towards the observation point, or if it remained stationary ... After 10-20 seconds the light dimmed and then went out as though concealed by cloud. The sighting had lasted approximately 1-2 minutes." (2).

Now one must remember that, according to the hoaxers, this account from an experienced observer relates to a light on the ground which did not move at all but simply went on, off, on and off again in a sequence lasting thirty-five seconds. If we take them at their word then it clearly shows how eyewitness testimony, even when totally honest, can bear little relationship to objective truth. The hoaxers also note that this sequence of movement does in fact fit in with the motion shown on the fake photographs that were produced. The motion did not occur, but witness testimony seems to have subconsciously altered to match the subsequent `proof 'that it did!

Mr Foxwell in fact only allegedly took two photographs of this light and then offered them to witness John Ben for analysis. He was part of the `experiment', and had already taken two shots of a fake object many months earlier. These were the ones John Ben had developed, thus creating a gross discrepancy between what was visually observed and what appeared on the photographs. As the hoaxers pointed out, nobody even interviewed Mr Foxwell once they had his `proof' with which to work. His story would have been rather interesting - to say the least.

The fake pictures show a circular blob on top and below a basic cigar structure. It was actually created on an oscilloscope and superimposed onto the background scene of the hill. The first account, once the film was processed, saw John Ben describe the image as "a large cylindrical object with two smaller objects leaving the small sphere". This natural, but presumptuous, assignment of three-dimensional imagery, and an implied artificial origin, again warns of a grave danger in testimony.

The photographs themselves were allegedly seeded with several clues to the hoax. For example, the background image was offset somewhat from the place where the pictures were supposedly taken. They also contained streetlights on the hill line that, when the hoax pictures were created, were broken but which were working when the stimulus was introduced and the photographs allegedly taken. Since Mr Foxwell included two comparison shots of the skyline minus the UFO which really were taken on the night of the stimulus, investigators had the opportunity to discover the hoax.

Yet another clue was that the hoax shots were magnified ten per cent in image size as compared with the two comparison shots that were claimed to have been taken from the same place with the same camera.

Unfortunately nobody picked up these things (it would have taken a detailed investigation to have done so). Several people came forward and proclaimed the pictures `genuine', including Dr Pierre Guerin, a leading French scientist, who put forward what he called a "tentative interpretation": "In my opinion there is no question of the object photographed being in any way the result of faking ...", and suggested further that "... the object photographed was emitting ultraviolet light which the eye does not see." (3)

The hoax was leaked in 1972 and FSR published an immediate full retraction. (4) On the basis of this, one has to question why SIUFOP left it until 1976 to publish the results of their `experiment' and even then did not offer the article to FSR. This considered, the FSR reaction, once the full story came out, was summed up in an editorial labelled `Cheats' and one can appreciate why.

Whilst I have strong reservations about the methodology here, and well understand the difficulties FSR faced, I do accept that this is a salutary lesson to us all. It should be apparent that the evidence must be totally consistent, and if it falls down in any one of three areas the case must be rejected. These areas are:

- 1. Consistency of the film image so far as analysis for fakes allows (this can include checks into focus, since a distant object will not be less in focus than the background unless the loss in definition is due to movement, and there are ways of telling whether this is so). Most fakes can be uncovered, although digital manipulation can create images that look correctly in focus, etc.
- 2. Consistency of the witness testimony (temporarily ignoring the film evidence and treating the investigation as if it were purely of a visual sighting).
- 3. Consistency between (1) and (2). This includes the factors that would have been uncovered in the hoax "experiment". If (1) and (2) had been fully checked out here the witness testimony would not have matched the film evidence in the important areas referred to.

With care this process can provide results. In *UFOs: A British Viewpoint* Peter Warrington and I showed how two probable hoaxes were uncovered because in the first case the photographs just could not have been taken from where the witness claimed, and in the second the 'blurring' of the object due to speed, as was alleged, was impossible due to several technical factors (5). Apart from these crucial points I would suggest there are three types of photographic case that should (in most cases)

be automatically rejected from further analysis. This may seem harsh, but I believe that such an objective approach is justified. These cases are:

- l. Those where the witness claims he saw nothing when taking the photograph (except in rare instances where the image is so clear that it begs querying see below). There are many different kinds of faults that can occur in the system of the camera (such as specks of dirt, lens flares and in the case of digital cameras false "orb" like images generated by the camera-flash reflecting off dust particles). Chemical film also can manifest faults during development; e.g. scratches on the negative, and also on the final print, such as drying marks etc. These can result in any number of bizarre effects.
- 2. Those when a chemical film is involved where a witness either refuses to release the negative for study or makes an issue out of copyright of the photograph and financial reward there from. Neither of these are necessarily proof of a hoaxer, although they often are, but analysis without the negative is virtually impossible (you could sign a guarantee for its return), and the claim for money inevitably detracts from the credibility of the witness, thus reducing the value of the evidence. Doubt will always linger.
- 3. Finally, reject too all cases where there is no clearly defined image. Perhaps just a squiggle of light is visible. These may well actually be TRUE UFOs, but as evidence they are useless and totally impossible to analyse.

It is true to say that you will not now be left with many photographic cases! Nevertheless, this is inevitable if you are to do your job effectively.

As an illustration I have broken down the 45 photographic cases to date handled by NUFON and UFOIN from 1978-1980 (these stem from about 1,600 cases in total and are thus about 2.8% of all those received). They divide into the following categories:

No Visual Stimulus = 4.
Light trails or dots = 10.
Dark or amorphous blobs = 17.
Clear shape but dark = 11.
Very clear, structured image = 3.

Of this group, 41 were still films and 4 movie films. For future reference we could classify these categories as Class 0 (no visual image) to Class 4 (very clear, structure. Obviously the latter is the most important, but two out of the three in Class 4 were proven to be hoaxes. Consequently, the photographic evidence, in this instance and elsewhere, is far from extensive.

It is true enough that the hoax element in photographic ufology is greater than normal. This is because when a hoax is contemplated it is human nature to create something that is seen by others, and it is also relatively easy to do this. In regard to chemical-based film, Peter Southerst wrote a guide illustrating some of the simplest methods, (6) and I am also indebted to Les Hall for allowing me to quote from his research. Les, a very experienced amateur photographer, kindly supplied the following photographs by way of example, to illustrate the techniques involved.

Les suggests four major methods by which hoaxes are produced. To quote him: "The first method, which is simple to produce and usually easy to recognize, is that by which an object is drawn or painted onto a sheet of glass or clear plastic and a photograph taken of a suitable scene through the glass. In the final print the object will appear in silhouette against the scene, usually the sky, and providing that the proportions of the object match the background, then the result should resemble a genuine dark object against a bright sky ..." **Figure 11** shows how this technique is used and the results. As the object on the glass must be close to the lens it will be relatively out of focus compared to the sky, thus giving lie to the illusion. There are other ways too, in which this kind of hoax can be uncovered, but as it is so easy to produce it is quite common.

The second method Les describes is by the use of a model: "They may be stationary, suspended, or even in flight. In all cases the general idea is the same, and that is to integrate the model into a suitable scene in such a way as to give the impression that the object was in fact a real UFO. It will be almost impossible for the hoaxer to produce a model which not only scales down precisely right, but which also looks right when placed in the artificial illumination that will be necessary ... bear in mind that there is only one sun in the sky, and therefore there should be only one shadow per item in the print and that it is definitely `not on' for shadows to wander off in different directions ..."

Les Hall completes his discussion with two more complex types of hoax. These can only be reproduced either in the dark room. Digital format cameras, with the aid of graphic manipulation software and a computer, can produce similar end results, albeit through other methods.

These involve taking two separate shots - one of a model against a plain background and one of the scene onto which the first shot will be superimposed. The two images are then placed on top of each other and a composite print is made. In the case of chemical format film this can then be re-photographed, seemingly giving an image of a UFO against the background on the final negative. In regard to chemical format composite pictures he describes several ways in which even this complex hoax can be discovered, chiefly due to the difference in focus the thickness of the negative film will create when they are overlaid on one another.



Figure 11: UFOs over a Nottingham suburb, as photographed by Les Hall? No! – the UFO's are unveiled below as UFO images stuck onto a sheet of plastic which was attached to the house window, and the above photograph taken through it.

If, however, the photographer is just a little cleverer he can produce a similar picture that is very difficult to detect (although Les provided some hints about this!). He photographs the model UFO against a plain white background which on the negative is totally black.

In regard to chemical film, when the UFO negative is now superimposed onto this developed print with the enlarger, only the part where the UFO is on it will affect the sensitive surface of the photographic paper. When this is developed again the UFO will appear, but the already developed background scenery will not be altered. This method produces a very convincing image, as demonstrated on the following page:

Even without going to such complex lengths superimposition is feasible. On most chemical format cameras it is possible to take a double exposure by not allowing the film to be moved forward between shots. A good fake manufactured by Kodak is illustrated, along with a case which is allegedly genuine (and the subject of the



Figure 12: A classic faked UFO. This particular image utilised chemical film and involved complex negative super-imposition. While very convincing it would not defeat expert analysis. It should be noted that even basic image manipulation computer software can now produce very similar (or even better!) results with relative ease.

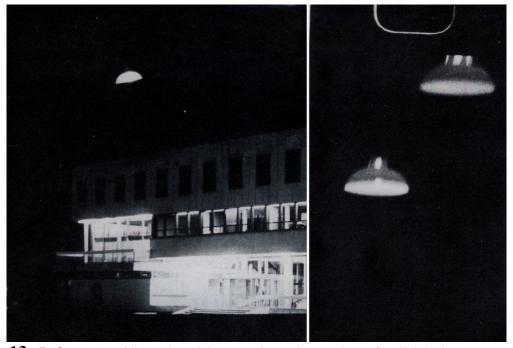


Figure 13: Left: A "UFO" produced by superimposing a shot of a lightbulb onto an external scene. Right: two "UFOs" allegedly photographed over Runcorn, Cheshire. Analysis by local investigators suggested that the picture was faked in a similar way to the previous image.

quotation at the head of this chapter), but which it is believed was created in this way. The 45 cases to which I referred earlier can be broken down as follows: hoax (13); film fault (sometimes coupled with a hoax once the spurious image is seen) (6); natural misidentifications (kites, balloons and aircraft are common here) (21); and

genuinely puzzling (5). In the early 1980's Peter Southerst made an estimate for me of the dozens of cases that Kodak received from the general public over the years. His figures were similar, but he thought that those which could be considered genuinely puzzling was somewhat lower (about 5% of the total).

Presuming that one does have a photograph that seems to pass the tests (and there are even more of these than I have suggested here) then what can one do with it? It is not an academic question because a fair number of such photographs do exist. (7). The next chapter makes some suggestions in regard to this; but investigators can also make significant contributions. For example, you can make a very careful comparison of the photographic images with the witness story. The taking of comparative photographs as close as possible to the original witness position is also essential. From these, compiled into a montage of the whole area, the actual behaviour of the object may be plotted and factors about its size, luminosity, and even speed, deduced from these.

Let us return to Les Hall, and examine another of his photographic case studies; the following example provides a good illustration of just what kind of data can be extracted with careful work.

The case was originally passed to him by David Rees, an investigator from the group MAPIT (Manchester Aerial Phenomena Investigation Team). He had a photograph which was taken at an air display, but the photographer had not noticed the intruder which appeared on the print when developed. Superficially it looked interesting, and Les was quickly able to ascertain that it was not a film fault but seemingly a real object on the negative. Consequently he agreed to a full investigation.

The first thing he did was to make a colour print and then to rephotograph this in black and white, since a black and white negative is much easier to analyse. **Figure 14a** shows an enlargement which is 26 times the actual size of the object on the negative. This gives evidence of an apparent discus shape which, if nothing else, is interesting. However, even this enlargement (which was the maximum possible from the new negative) was not sufficient for anything meaningful to be said about the image. Consequently, he re-photographed the relevant part of the print using extension bellows and then enlarged the final negative to the maximum possible size. Because the original image (enlarged 280 times from the original) was so clear this is incorporated into **Figure 14b**. By filling in the denser parts of the image Les Hall's suspicion that it was in fact a bird, which quickly flew through the field of view, was seemingly justified. The shape is clearly more bird-like than discoid. It can even be presumed that the bird was at that instant flying away from the camera.

Making two reasonable assumptions (that the camera setting was on a hundred and twenty-fifth of a second and that the bird was flying about twenty mph) Les was able to calculate mathematically the size of the bird as eighteen inches. Some more

complex mathematics even allowed him to work out that the bird was approximately 176 feet from the camera. Naturally the initial speed assumption may have been slightly wrong, and this would have made some difference to the results, but the order of magnitude of them must be correct.

As he stated: "... in the absence of sufficient data, the best that can be done is to establish that the visual identification (as a bird) is a reasonable one, and this has been done. If one lesson is to be learned from this exercise it is this. Record all data, no matter how trivial it may appear to be [in a photographic case], as it may well prove to be the vital piece required in the analysis."

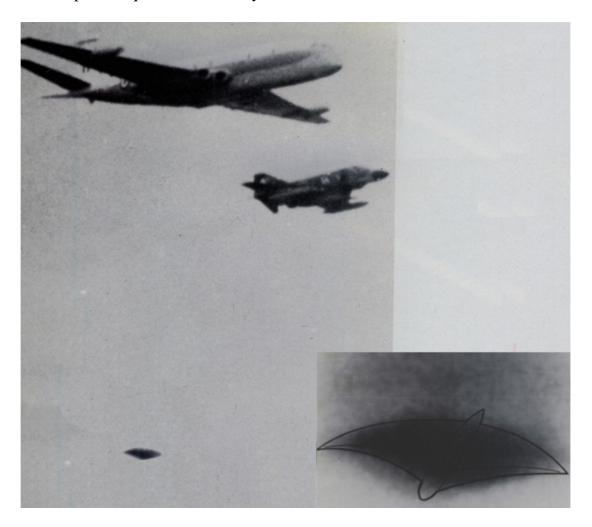


Figure 14a: An enlargement of the "UFO at the Airshow" (see text above). The "UFO" appears as a typical saucer-shaped object beneath the aircraft. **14b**: An enlargement of the UFO (insert), plus tracing of the light/dark areas reveals the shape of a bird in flight. Another UFO bites the dust!

As a consequence of increased sophistication in home computers from the 1970's onwards it has become possible over the past few decades to convincingly manipulate – or even totally create - images in a digital format. From the early 1990's onwards **Computer Graphic Image (CGI)** techniques, once confined to blockbuster

Hollywood movies such as *Jurassic Park*, have gradually become more available to technically-aware home computer users.

One approach of intermixing digital images is known as the *chroma* or *blue-screening* method. This represents the digital equivalent of the chemical film superimposition process described previously in this chapter. However, chroma - given the right equipment and skill - is easier to enact and, under the right circumstances, produces even more realistic images than its analogue predecessor. Modern home computers equipped with a sufficiently powerful processor and high memory capacity are also capable of digitally creating 3-dimensional objects, which by using a variety of programming techniques in tandem such as *texture mapping* and *ray tracing*, can generate highly realistic "UFOs" with convincing "natural" lighting and surface attributes. With a little more effort these can be subsequently rendered into convincingly lifelike moving image. It is therefore not surprising that an increasing number of video sequences depicting "UFOs" (often with no known provenance) have appeared on the Internet in recent years!

It should be noted that fairly convincing still images can also be easily created by less sophisticated means, such as through relatively inexpensive graphics software often packaged with computer peripherals such as digital image scanners. Nonetheless, the creation of convincing fake UFO images remains very much an art. As a consequence, many such hoaxes can be unmasked by noting the same kind of inconsistencies mentioned previously in regard to chemical-format images; for example it may be noted that the shadows associated with the "UFO" (or its contrast in relation to other features) appears wrong, or its outline is seemingly too sharp... and so on.

On the other side of the coin, similar techniques can be used to enhance both chemical based and digital images of supposed "UFOs". These can bring out subtle tonal and density factors in the original image and provide a much clearer picture in the end. The same method is employed by space scientists to "clean up" images sent back by planetary probes, and the amazing difference between these and the raw product is certainly noteworthy.

By using this approach a (now defunct) Arizona group called Ground Saucer Watch added significantly to our knowledge of some photographic cases during the 1970's and 1980's. (8) Several cases widely considered "genuine" were evaluated as fake by GSW. A classic example - although not actually of a UFO - concerns the famous sequence of "fairy" photographs taken early in this century by two young girls in Cottingley, Yorkshire. They had been the subject of long years of controversy following their endorsement by the famous personage, Sir Arthur Conan Doyle. Even Kodak (with their then primitive techniques) could not prove them faked, although their reaction then was certainly interesting in comparison to that of today. "They do not seem to be faked," they commented, "but since there are no such things as fairies -

they must be!" Now, however, GSW blew open the hoax by finding traces of strings on the images and other signs that these are not genuine photographs (9), an evaluation subsequently confirmed by confessions by the girls concerned. Without doubt this kind of work has a great deal to offer UFO research in the coming years.

I hope that you can see what one can find out if one looks hard enough; but to help you further we provide further guidelines on investigating photographic cases in the next chapter.

Investigation of photographic cases never really becomes complete, unless an explanation is found for the image. Even years after one thinks one has found a perfect case something comes along to refute this. Some famous photographs taken in the Madrid district of San Jose de Valderas were held for years as some of the most significant on record. (10) They were accompanied with physical trace evidence and were allegedly taken by two independently located photographers (a rarity almost unheard of in UFO photography). This case was subsequently exposed as a hoax.

I think, therefore, it is wise to treat photographic evidence for the existence of UFOs with very great care – particularly today when highly realistic images can be created and manipulated with comparative ease. This is the only way to be safe and to prevent oneself (and ufology) from looking foolish. To be taken in by the efforts of a ten year old boy using a box camera inn his back yard (and this has really happened!) hardly augurs well for the abilities of most UFO investigators.

Heed that important warning.

Things to do:

- 1. Obtain a simple-to-operate camera (preferably one which allows control of shutter speed). Try to fake a UFO picture by painting a dark UFO image on a sheet of glass or Perspex and shooting the sky with this in the foreground. See how many of your family and friends will be prepared to believe it is a UFO, but do not perpetuate the hoax. This kind of fake is easy to identify.
- 2. Look back through photographic collections (your own and those of friends) and see what spurious images (dots, "orbs", blobs etc.) you can find on prints that could conceivably be interpreted as a UFO by the uninitiated. You should find several.
- 3: If you have access to some graphic manipulation software, experiment with creating "UFO" images. See how realistic an effect you can attain with even fairly basic programs. Again, please do not perpetuate the hoax!

11: Investigating Specialist Cases

Occasionally, the complexity of some UFO events is such that they may require special measures and/or knowledge to bring them to a successful conclusion. Under the Randles/Warrington system such cases encompass those falling within the INST category and all cases above CEI grade (along with many CEI cases themselves). Such cases, of course, represent the "high strangeness" events many ufologists believe represent the "core UFO phenomena". But while their status gives such events notable allure and kudos, their inherent complexity should also ring loud alarm bells of caution in the heads of UFO investigators who encounter them. They can be said to differ from conventional UFO reports by requiring specialist equipment and/or knowledge to correctly assess and (as a consequence) often prove expensive to investigate in both time and financial resources. Entity cases with no associated effects represent one exception to this rule, although they should be subject to some degree of expert assessment aimed at ruling out any psychological causes, in any event.

While there are always things an average investigator without specialist training can do even with the most extreme events, the golden rule should always be **DRSOUT** – **Document, Record and Sample Only Unless Trained!** One particular useful skill an investigator can acquire under these circumstances is to learn their limitations! As the above mnemonic infers, unless an investigator is trained to carry out a specific technique or operate a specific piece of equipment he or she should leave it to those who can! This is because inaccurately conducted procedures may either damage the evidence being studied or create spurious "strange effects" that needlessly add to the case's apparent strangeness level (effects which thereafter also have to be subsequently investigated!). Of course, it may not be possible to acquire expert assessment of a given piece of UFO-related evidence; but it is under such circumstances investigators can perform an invaluable task of sampling and recording – allowing the option for expert analysis (which might never have occurred other than for their intervention) at a later date.

This chapter will now proceed to discuss each type of "special case" in turn, giving advice on how best to deal with some of the more complex cases an investigator is likely to encounter. It concludes with suggestions on how to find those elusive individuals with the skills required to conduct such specialist work.

1: INST - Photographic Cases:

Photographic evidence represents the most common class of "special" case – fortunately they are also the easiest to handle. In most situations they relate to a conventional "distant" UFO event – albeit one complicated by the existence of this (alleged) graphical evidence. Indeed, most investigators (using the basic skills detailed in previous chapters) have a fair chance of resolving such events without any

expert intervention, if subsequent investigation indicates the picture only shows a basic type of IFO. Providing you are reasonably sure, the case may then be closed without further ado – although following some of the procedures cited below will doubtless prove beneficial.

Where chemical-format film is involved it is vital to get access to the original negative(s) as rapidly as possible. Such evidence can quickly become scratched or dirty after repeated handling by gawping friends or even get lost altogether. Most witnesses do not realise the negative is more valuable than the prints generated from it and so take little care of it/them. By all means give an agreement for the loan of the negative so that tests can be conducted, saying that you will return it when these are completed and confirming that the copyright will remain the photographer. Do not use the picture in public without consent! If at all possible prevent the witness from sending it through the post, to avoid the chance of such evidence being lost in the mail.

Ideally (again where chemical-format film is involved), the best approach is to leave the film in the camera unprocessed. Ask if you can take care of its processing, this providing an ideal start for photographic analysis. However, assure the witness that you only intend to borrow the film for research and it remains their own property. If the film has already been processed you need to see all the other negatives from it. Hoaxers may be reluctant if other shots before and after show less successful attempts to fake a UFO. They only want you to see the one that worked! A genuine witness should be perfectly happy to let you see the negative of a UFO in its proper sequence in the film. The surrounding pictures should fit in with the witnesses' story, of course. For instance, if they claim they took one UFO picture whilst on holiday at the seaside but all the surrounding shots show their back garden or garage - ask why!

The above notwithstanding, we are presently living in a transitional period in which chemical-format film (and even the compact video tape introduced only two decades ago) is being replaced by digital storage media. While this has resulted in the proliferation of inexpensive, convenient and widespread image recording technology, digital images in standard JPEG format – the most commonly utilised - unfortunately represents lower quality evidence than earlier analogue formats. In many cases definition is not always as good and (worse still) they are more susceptible to manipulation. One consequence is that motion video sequences of alleged UFOs are becoming more commonplace - the majority of which are, unfortunately, anonymous well-executed hoaxes! However, newer digital cameras have the option of storing images in so-called RAW format. These represent the digital equivalents of negatives; data is retained (as its name infers) as pixel values which require processing before they can be viewed as an image. This format also results in higher definition pictures. For both these reasons they have greater evidential value, especially as image data is retained in its original form.

Whatever the format, endeavour to preserve the digital recording media/camera in the condition and/or configuration it had immediately after the UFO event, although the ease in which images/storage media can be removed from such cameras obviously makes this difficult to verify. Furthermore, endeavour to copy the relevant storage media **in its entirety** as soon as possible, ideally using this copy for demonstration and indirect analysis (to minimise the wear and risk of damage to the original). Also retain the original storage media for detailed analysis, reimbursing the witness for its cost. If the witness will not part with it, suggest they remove it from camera and store it in a safe place for future examination - again, reimbursing the witness for the cost of the equivalent replacement media.

During the investigation of such a case make a special note of the following:

- Note date and time all images were taken.
- Note exact make and model of camera used.
- Note lens fitted, along with focal length (compare with SLR if digital format).
- For digital cameras note mega pixel rating (and whether CCD or CMOS configuration), ISO sensitivity range and ability of optical and digital zoom. Check if the latter was used during event.
- Note film storage medium used (also format and storage capacity, if relevant).
- If chemical format film used type used, ASA rating and age of film.
- Note shutter speed used (all photographs).
- If a moving sequence videotape or digital format film note:
 - 1: Total duration of sequence.
 - 2: Period (in minutes and seconds) within sequence when "UFO" appears.
 - 3: Duration of UFO sequence (in seconds or minutes).
- If chemical film is involved note when and where film was processed.
- Note what images appear before and after "UFO" image. If chemical film is involved, try to safeguard the negatives. If digital, ensure preservation of original RAW format data in instances where it exists.
- Finally note how experienced the photographer is? Furthermore, note how often has he or she used the camera concerned.

Some of these aspects may not be remembered, especially if the case is old. But record as much of it as it is possible to do. Additionally, take comparative photographs of the location where the UFO was filmed - as the camera saw it - then do so again using the original camera where possible.

Some other things to note in regard to pictorial evidence:

- Was UFO seen/noticed during filming by "witness"?
- Does the witness accounts match the pictorial record?
- What is the witnesses' attitude to the evidence? Does he or she wish to capitalise upon it in some manner, or wish to remain anonymous, etc.?

- How skilled is the witness in using graphic manipulation software?
- How does the camera resolve light sources and images on various focussettings? How does it resolve features such as lens flare, reflection, etc.
- Is lighting and focus on UFO consistent with similar features in the picture and/or its believed distance from "observers"?
- Are other people shown in the picture? Does the witness know who they are?? Can the investigator speak to them???

2: CE I's and CEIIs - Mechanical Interference cases:

Equipment that malfunctions in the presence of a UFO is another common claim. However, unless you can get the equipment studied there is no way to be certain it was not some other unrelated fault. If a witness says a TV set failed when a UFO flew by, try to have it looked at by an expert in the field. You may discover the set has a long-standing problem. When the above happens, or a radio set suffers static effects during a sighting, always check the local area for sources of interference.

The car stop case is possibly the most dramatic you may encounter at some point in your work. They are rare but amazingly consistent. Engines and lights are generally both affected but once the UFO has gone all the power returns to normal. Whilst such cases undoubtedly occur and can be mystifying, the vehicle needs a full inspection looking for any self-correcting faults that might have been to blame. Similarly, if you get access to the car early enough it may prove useful to do a comparison magnetic signature check with a similar car of the same vintage. You might find that cooperating in such an unusual exercise brings publicity that appeals to a garage. The idea is to look for any residual effects that a powerful electro-magnetic field may have created. If such a force is what stops an engine the strength must be very high and would change the signature etched into the car on manufacture. In any event, aim to document the following:

- Make, registration and age of affected device ideally taking a picture of it.
- Known history of device where purchased, past owners and problems, etc.
- Functioning of device following event.
- Note how device was powered.
- If a vehicle, note mileage and how much fuel was in the tank (along with the type of fuel used).
- Record any visible anomalies as soon as possible produce scaled photographs and/or drawings of effect, along with a detailed textural description of same.
- Obtain a detailed description of the effect and subsequent return to normal operation including sounds, smells, road handling, durations and sequence of effect(s) etc.
- If possible if device (or portion of device) was damaged and removed, retain it for future examination.

3: CEII cases: Ground Marks and Physical Traces.

In most instances one has to rely very heavily upon witness testimony for information about the UFO, or even evidence that it was ever there at all. Even then one cannot be sure that some form of visual hallucination has not occurred, and there are always nagging doubts. Why, for example, did nobody else report seeing this spectacular UFO? Therefore, a story that comes along accompanied by traces which appear directly related to the presence of the UFO is of considerable importance. Scientific analysis can now begin.

Unfortunately, such traces are by no means as common as one might hope. This is a factor we must ponder when contemplating the supposed objectivity of the phenomenon. The first issue to bear in mind is this; although they seemingly represent some of the highest strangeness events Ufology can offer, never dismiss the possibility of a rational explanation for a claimed UFO landing event.

Naturally one would not expect a UFO to leave its mark in every instance when it comes into contact with the terrain. The conditions might not be conducive to traces. However, it is a cause for some concern when a witness says that a seemingly massive object touched down on damp earth but departed without any remnants whatsoever. Does one conclude that the UFO was actually without weight? Such has been proposed. Or was the object never physically there? Is it evident that a "landing" even took place to begin with? Optical illusions can make an object that vanishes over the horizon seem to land. As with most things in UFOlogy beware of taking a statement at its face value!

The following case provides one good example of why such caution is justified Following the publication of *UFOs: A British Viewpoint*, one of the letters I received in 1979 came from an elderly lady in Wallasey, Merseyside. Paul Whetnall and I decided to check this out, since she claimed to have observed stray lights and a floating six foot tall silver-suited entity in her rear garden. This had reappeared on numerous occasions since autumn 1977. The lady's garden turned out to be long and overgrown. It became the focal point of our investigation when she advised us that a few weeks beforehand she had seen a large, red, cigar-shaped object descending at an angle into the corner of the garden and resting there. She had closed the curtains quickly and left it. Although this might seem a strange action she claims that she was already very used to seeing lights in her garden and had apparently learnt that if she ignored them they would go away. She found the weeds crushed down in an oval patch and the leaves on the low bushes within that patch were brown, dead and covered in a grey furry substance. She regarded this as unusual and called the police, but they did not respond to her call.

When Paul and I looked at the area there was still a faint indication of an oval crushed patch. It was also true that the leaves within the oval measuring 2.4 x 1.2 metres (8' x 4') were dead, brown and crumbled into powder with any pressure.

Covering them was indeed a grey, furry deposit, which we immediately suspected was a fungoid growth. The spot was within a few feet of a tall brick wall, adjacent to which was a fallen tree trunk. This was heavily decayed with the wood just a soft, goolike texture. The witness asserted that the tree had been like this for some time. We took samples of the leaves and showed them to an expert in gardening affairs. He was able to tell us immediately that they were suffering from a common fungus which occurs frequently under the garden conditions that we had encountered. Clearly we have an insoluble problem here. The fungus was probably present for some time prior to the sighting and yet the witness reported a phenomenon that seems to fit the subsequent traces. (1)

One might ask whether the UFO "stimulated" a very common fungus - which could be found anyway under such circumstances. Yet, how could such a stimulation occur, and is it not stretching credulity a little too far? Perhaps more plausible is that the witness's memory of the UFO event was altered subconsciously when she found the subsequent traces. The connection was purely a concoction of her inner mind. How often might not this occur in UFO folklore?

Clearly physical trace evidence is not the incontrovertible proof of UFO reality that one might hope for. Yet it still must be regarded as important and be handled with some care and thought. UFO traces are interesting and important, but naturally they must relate to a UFO that was allegedly seen. Marks found when nothing was visually reported are, to say the least, dubious evidence, and should be regarded as such. This has to be the case if even a straightforward landing with clearly apparent remnants can lead to so many unsolved problems.

"Care and commonsense" should be the watchwords in regard to dealing with such evidence. In one instance a witness collected samples of a green powder from a landing site. He felt dizzy and ill after handling these and therefore presumed that radiation was involved. So what did he do? He put the samples in a plain envelope marked 'Radioactive' and sent it through the post! Fortunately, the sample was not the slightest bit radioactive; it was, in fact, just soil plus a few fertilizers - but such action could conceivably have caused a rather nasty incident. (2)

One can, on the other hand, go to the other extreme in handling trace samples. There is no real evidence that landing sites are left radioactive following an encounter. To approach a site heavily protected by lead clothing and thick gloves in case of contamination is somewhat extreme behaviour which will not only add to the media inspired image of `nutty' ufologists, but may well give rise to a local rumour that "ufonauts" have landed again and been searching the site! To date nobody has died or become seriously ill following the handling of trace samples, and as the illustration above shows, precautions are the last thing on most people's minds. Consequently, one seems justified in concluding that whatever else UFO

trace evidence is, it is not likely to be the harbinger of deadly viruses from beyond the stars. Common sense is all that is required.

Sensible site analysis would consist of careful photography and sketching of all major features in the area, plus any possible traces, before anything is removed, disturbed or whatever. Accurate measurements of any depressions or marks should then be made. As for the actual collection of samples, there is a simple process for this. But supposing there are indications that something may have come down - e.g. marks on the ground, a damaged tree or scorched bush? Then follow it up carefully, but without presuming there has to be any link with the UFO sighting. Two events can - and often have been - related together only by the mind of the witness (or, of course, that of the investigator!).

Before you start any site examination, walk the area for around 5-30 minutes, noting its general layout and configuration. This will greatly assists the subsequent investigation. You may need to think broadly. In one case a landing mark in a garden was outlined after the event by snow. It looked like prime evidence until it was learnt that former residents of the house had a garden pond of this same shape at the exact spot and which had since been filled in. Normally this was invisible but the melting snow was lining it out.

Gloves should be worn so as not to introduce any chemical substance from the hands into the sample. Airtight plastic bags are useful for taking soil samples. A collection should be taken from various points - including at least one control sample of similar soil from an area not within the apparent traces. The samples should be marked A, B, C etc., and the exact spot from where they were taken measured and marked onto a scale plan of the trace site. This is time consuming, but very necessary work. Speed in such measuring and sampling is also vital, particularly in Britain where the ever-changing weather could rapidly destroy any traces that might be present.

Sometimes a large indentation or footprint might be thought a trace. If so, it is a good idea (after all other work is complete) to attempt to make a plaster-of-Paris mould of the marking. The success or otherwise of this will depend on several factors, but it is something which could prove useful to analysts.

Thus, to expand and recap on the above, when documenting trace evidence record/enact the following:

- Note locus of event; ascertain an accurate Ordnance Survey grid reference for the site, ideally using a hand-held GPS unit.
- Write a description of how to reach the site, using roads and local landmarks.
- Note visible fauna and flora within area and also that of a similar but slightly more distant area. Note any apparent differences between the two.

- Photograph area with a visible scale: a surveyor's 1-2 metre ranging staff costing around £12.00 (or home-made equivalent) is ideal for this. Ideally photograph the site from various compass directions.
- Make an accurate scaled map of the traces, ideally using a pencil onto thick tracing paper, which should be subsequently inked in when satisfactorily completed. Also note orientation of trace in relation to magnetic north on drawing and (ideally) include other nearby features, to scale, for reference.
- Write a written description of the traces. Record size, shape, depth, colour and any other feature that strikes you as noteworthy.
- Take soil samples using clean, unused plastic bags (and tools subsequently cleaned only with (ideally) distilled water. Take one or more samples within any significant trace-spots, but also several more several hundred metres away (the latter representing a "control" comparison). Molehills provide a particularly useful source for these! A "deep" soil sample can also be taken by pushing a thick-walled plastic pipe as deep into the ground as possible, thereafter sealing the ends with clean, unused plastic bags on recovery.
- If available (and where time and/or weather conditions allow) attempt to take a plaster of Paris or similar cast of any indentations. Label casts with a reference and note origin on site plan.
- Following investigation check every now and then over a 12 month cycle to see if the effect disappears or remains. This can offer valuable clues.

A list of useful equipment for this particular class of "UFO" event is given in **Appendix D**. Documentation of supposed landing sites can be aided by laying out a survey grid – the procedure for which is documented in **Appendix E**, although the writers advise that you practice laying out such grids beforehand)!

To once again repeat the advice cited above, always take basic health and safety precautions when visiting such sites! In essence, the "golden rule" is to never endanger yourself (or others) while carrying out such fieldwork. As previously stated, when carrying out such an operation wear thick gloves, goggles, coveralls and ideally a facemask. Cover hair with a hat and/or a shower cap or similar and try to avoid skin contact with the "affected" area. Most notably, avoid exposure to any unusuallooking trace or object, and report anything suspect to the local Environmental Health If you are concerned about the possibility of radiation agency. contamination/exposure wear a dosimeter, a paper strip which reacts to presence of radiation. In the highly unlikely event that any abnormality is noted, seek immediate medical advice. The writers stress the latter is merely a precaution - there is little (if any) evidence that UFO traces are associated with significant levels of radioactive contamination.

Furthermore, wear good, fairly robust waterproof clothing with stout boots (even in Summer)! Have a supply of fresh water and a First Aid kit handy, and wear sunblock if working under clear and hot conditions. Always handle soil, etc with thick gloves

and avoid contact with bodies of water. Also attempt to determine any special hazards posed by the area you are working in beforehand, via the Internet or Local Library. Store any recovered evidence in a clean, dry place not subject to extremes of temperature and not containing any chemicals and/or foodstuffs.

4: CE II's: medical effects.

When a witness claims to suffer physical ailments after a close encounter with a UFO your primary duty is to consider the witnesses' welfare.

In any event, the scope of your investigation will be governed by how quickly you discover the case. Fortunately, serious injury or illness which may conceivably be related to a UFO sighting is extremely rare. Physiological effects are commonly nothing more than a pounding headache, dizziness, nausea and/or vomiting. They last from a few hours to little more than two or three days and as result it is quite rare for a witness to consult a doctor. By the time they have the courage to do so the symptoms have usually cleared up. Whilst it is faintly possible such these effects result from close proximity exposure to radiation, there are other more down to earth possibilities that should initially be considered. For instance, having a UFO close encounter can undoubtedly be a shock and the above effects are often triggered by that alone in many non-UFO situations. Similarly, there may simply be a bug doing the rounds (e.g. a cold or flu). Always try to discretely ask other members of the witnesses household if they had recently been ill. If you find someone was but who had not been with the witness during their encounter, the chances are that this is the source of the claimed physiological effects. Nevertheless you should note these symptoms as they may provide useful data in the future.

If you discover a case within hours or up to a day or two and the witness alleges physical symptoms (especially unusual and visible ones such as a rash on exposed parts of their body) then do two things right away. Firstly, photograph the effects using a range of exposure settings - as body marks can be difficult to visually capture and this is a one-off opportunity. Secondly, urge the witness to see a doctor that day. Ideally, also ask them to get the doctor to agree to talk to you afterwards – although it will be extremely unlikely that he or she will be willing to talk to a "Ufologist", due to time pressures and concerns over their standing within the medical community.

In any event you will probably find doctors very reluctant to cooperate to any meaningful extent. For obvious reasons, confidentiality laws prevent access to another person's medical records in most circumstances. When dealing with effects on animals such severe restrictions will not apply.

Within these limits attempt to document the following:

• Note (and describe in detail) any reported symptoms, their sequence and duration.

- If any physical traces are visible, measure, photograph, as described above, (with indication of scale) and write a written description of same where decency and the witnesses' dignity permits it!
- Draw a representation of the mark(s) on an outline relevant to the subject; suitable templates can be found in art shops, books or on the Internet.
- Ask the witness, discretely, to discuss their basic health prior to the sighting, and (if possible) their past and current life circumstances.

It should go without saying that, unless you have a recognised medical qualification in good standing do NOT attempt any intrusive or other procedures that has the potential to cause harm, as you will be legally liable if anything goes wrong (or if it is deemed "intimidating" in any way)! It is also <u>illegal</u> to practice medicine without any recognised license to do so!!

If these claims are associated with an artefact, discharge or residue the investigator should attempt to preserve it for future study. Such an object should be handled with disposable gloves and/ or tweezers and placed in a clean, unused, airtight sealable container. Obviously, organic matter is subject to degradation as time progresses – so prompt assessment is vital. It may be necessary for such an item to be stored in a clean, refrigerated area (the investigator may have to consider buying a "mini-fridge" or similar for this express purpose). In any event under no circumstances should it be stored with any other substance!

5: Entity Reports:

Undoubtedly the strangest cases you will ever come across will be CE 3 and 4 events - those involving observation and some measure of contact between alleged UFO entity and witness. They are about as rare as physical trace reports, if not rarer still.

There is a spectrum of contactee cases. At the one end we have a simple landing where an entity gets out of a UFO and speaks (by one means or another) to the witness. At the other there is the religious contactee missionary, who receives messages from `space people' frequently, and who attempts to pass on this `higher teaching' about the future of mankind.

Let us look very briefly at two examples of this spectrum. On Thursday 4 January 1979, Mrs Jean Hingley, a housewife from Rowley Regis, West Midlands, had just seen her husband off to work. She was in the kitchen about to give some water to her pet dog when she noticed an orange light through the open door. There was then a whooshing noise behind her back and she turned to see three weird beings flying into her living-room. They were only three feet tall with white skins and black eyes. They wore a strange green suit with buttons on the jerkin and were surrounded by a warm, orange halo. Their most peculiar feature, however, was the gossamer-like wings which could fold inwards like a concertina.

The little beings floated about the room, touching everything, and then sat down on the settee. A conversation ensued during which they talked about Jesus and Jean's marital affairs. One of the beings also said, "We come from the sky." They drank a glass of water and took a home-made mince pie each, but then reacted with fright as Mrs Hingley lit a cigarette. Apparently she was now quite at home with these bizarre creatures! In fear they had fled outside to what Jean now saw was an orange oval-shaped craft on her lawn. It departed and reputedly left a circle of melted snow in the garden, which investigators later photographed. (3)

This, one might say, is a straightforward contact story. The next one, however, is far from that.

In the late 1970's a young man (given the pseudonym Norman Harrison by investigator Nigel Watson) experienced a protracted series of CE4 experiences. This witness was a failed artist living alone in dilapidated urban conditions; furthermore, Harrison's parents were dead and his last girlfriend had left him in 1966. Out of this background came a sighting of a huge cigar-like UFO over Leeds in 1974. Following this, he claims numerous telepathic contacts with alien intelligences, one of which is known as Uriel, where he seemingly taps into the beliefs and warnings of several races from beyond the stars.

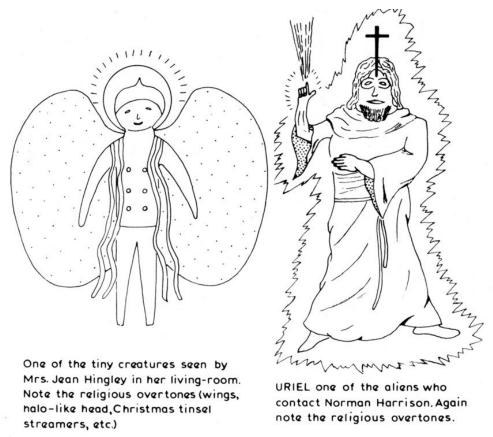


Figure 15: Two "UFO" entities from either end of the "CE4 spectrum" – although totally unrelated they nonetheless reflect some general shared themes.

Norman described various `space philosophies' in detail and was convinced the aliens showed him that the world was on the brink of catastrophe (namely about to suffer a cataclysmic war). Quite often his personal abhorrence for science and what it has done to modern life (atom bombs, pollution etc.) overlaps without boundary into the supposed messages from the beyond.

Roger Hebb and psychologist Shirley McIver helped Nigel to probe this case. Their conclusion was: "We might surmise that the messages of the aliens to Norman are metaphorical and symbolic expressions of Norman's own feelings of guilt, isolation, alienation and emotional stagnation, which have emanated from his own psyche. It is no wonder that he fears the impending cataclysm." (3)

Whilst these two cases may seem very different there are nevertheless important similarities, and these also seem to be factors in other contact experiences. Here are some of them:

- a) Both occurred in densely populated regions of a major conurbation (in total contrast to most UFO experiences which tend to be inversely related to population density).
- b) Both involved single witnesses (it is very rare that contacts involve any other than the one person who makes the communication).
- c) Both involve individuals who were in a sense artistic, sensitive or submissive.
- d) Both occurred to individuals who had suffered a significant change in their lifestyle (Jean Hingley had recently left her church due to some troubles and this had created a gap in her life).
- e) Both involve clear dream or hallucinatory elements of non-reality (yet tinged with some degree of objectivity). For example, Mrs Hingley found it difficult to recall more than just a few snatches from a lengthy conversation that, if objective, one would presume would be highly memorable.
- f) Both seem to involve irrational emotions for example, no acute fear. Often, witnesses do not behave as if they are physically meeting totally alien creatures, but rather as if they have control over the situation (perhaps they do).

One could continue, no doubt, but I think the foregoing is enough to make anyone realize that there is at least a probability that these experiences largely (or even completely) emanate from the internal psychology of the witness. Investigators cannot afford to ignore this fact.

Entity encounters can be grouped in the following categories:

Type A occurs when a witness has an experience with a UFO and immediately recalls detail of an alleged contact with aliens inside or outside this UFO.

Type B is similar except that the contact occurs inside the witness's home, quite often in the bedroom. Physically seeing a UFO is uncommon in such cases.

Type C concerns subsequent psychological experiences (vivid dreams or phobias) that lead a witness to suspect that a recalled UFO sighting may have involved much more (actually being a contact), although this specific memory is repressed. The hidden memory may be released by a normal trigger, or more often by the use of regression hypnosis.

Type D does not involve any form of physical contact but the witness feels that 'messages' he receives by some communication means (e.g. telepathy or automatic writing) come from alien sources.

The two examples we have seen so far involve Type A (Mrs Hingley) and Type D (Norman Harrison). The latter can very often be ascribed an explanation in normal psychological terms (although it would be wrong to presume that this must necessarily be so). The former, whilst not uncommon, rarely provides much detail. The intermediary types are in fact the most interesting, and it is on the assumption that you will have to deal with these that I will proceed.

Type B will be difficult to analyse because it may not be easy to distinguish this from a dream. If a witness wakes up to confront an alien in his bedroom he may believe he is awake (enough to swear so under a lie detector), but he could be having a hypnologic hallucination. These occur on the threshold of sleep and I am sure that most of us have had them from time to time. In the late 1970's, for example, after being up early to see my fiancé off to work I fell asleep again in the living-room by the fire. In a semi-awake state I `saw' him enter the room and I reached out and actually touched him (so my senses told me). Then I awoke fully and realized it was not reality. I had dozed `hoping' he would return as the weather was bad and I was worried about him on his motorcycle.

The effect of these hallucinations can be startling. (5) I recall in June 1974 when I was in hospital undergoing extensive tests. The doctor was extracting blood from my arm but was called away urgently. I am somewhat anaemic and felt myself gradually becoming light-headed and losing consciousness. I must have passed out for just a few seconds and fallen off the chair I was on. I came around on the floor staring at the ceiling and into a strange doctor's face. For an instant this totally new perspective absolutely convinced me that all that I could remember from the past was a dream from which I was now awakening into true reality. It passed in seconds, of course, and I understood what had happened, but I shall never forget

what remains just about the weirdest experience of my life. Reality and unreality are so easily intermixed.

As far as **Type C** goes there are naturally many difficulties here. The UFO experience may well have caused the psychological traumas, but if memories of an actual contact emerge can we be positive that these memories are real and had actually been repressed for one reason or another? Might it not be that the trauma has created false memories (however real the close encounter itself might have been in the first place)? Do not completely misunderstand me here. I am not totally denying the possibility of some alien manipulation, but if one is to be an objective investigator then one must consider all types of solution, exotic and otherwise.

No doubt you will by now realize that to investigate a contact case is one of the most difficult things you will ever have to do. Of considerable importance is a full psychological and sociological profile of the percipient. You may need the help of a trained psychologist to do this effectively, but there is still a great deal you can do on your own.

The tendency will inevitably be to take more interest in the details of the witness's story, but in a contact claim this is of secondary importance. To decide reality or otherwise (and of course one can never actually do this with certainty) you need to know how a witness relates to his family and friends, any experiences in his life leading up to the contact which he feels are important, his attitude to moral, ethical and religious questions, and his feelings and adaptation to the phenomenon after it has occurred. All this is additional to the standard questioning one must make of any witness (as outlined in previous chapters), and must be done so as not to infringe upon the personal privacy of the witness, as far as is practically possible.

Remember you are not out to prove the origin of a contact experience. Very probably you are not in a position to judge this. You are there to extract all the relevant data - and this will include information over which the witness may be touchy. He might suspect that you are trying to prove that he is hallucinating by asking, for example, about past illnesses or drugs he may be taking (both nevertheless important questions). You should stress that you are not a 'doubting Thomas', just a thorough investigator who is doing the job prescribed to him. Of course it is just this type of case that will more often than not involve you in some form of counselling. It is up to you to try to help the witness overcome any traumas the experience has created, even if this means calling in outside help.

Another problem you will confront is that a contact experience is rarely a "one off" event. It is a factor of contact claims is that they remain durable and time-consuming. Frequently an investigation will stretch into many months, and it is by no means unheard of that the story is still incomplete years after its first discovery.

Most frequently there are further contacts (perhaps during the term of your investigation), or allegedly occurring paranormal phenomena. It is vital, though difficult, that you remain aloof from these. Becoming too enraptured leads to a loss of your objectivity and also provides a subtle stimulus to the witness to present further 'experiences' because he senses you expect it of him. He may very probably not be aware that this happens.

6: "Missing Time" cases and hypnotic regression (6):

The use of regression hypnosis in regard to claimed instances of "missing time" (and the "alien abduction" narratives often recovered as a consequence) has become a significant aspect of ufology over the past four decades. This class of experience is typified by the work of American UFO researchers such as Budd Hopkins (7), Dr. David Jacobs (8), Dr. John Mack (9) and the high-profile claims of writer Whitney Strieber (10). As a consequence, the discovery of new abduction narratives through the use of hypnosis is presently deemed a priority among many contemporary UFO researchers. Despite this trend, there are, however, some good arguments for **never** using regression hypnosis within this context; unfortunately, many UFO researchers seemingly fail to consider its drawbacks.

Consider this scenario, which comes from a real case. A family were on an outing to some relatives in October 1974. They returned towards their home in Aveley on the Essex border, hoping to catch a late-night television programme. They were nearing home and well in time for it when they observed a bluish light in the sky. After dismissing it as a UFO, it disappeared behind trees. They then rounded a corner and drove straight into a bank of green mist that straddled the road. The radio started to splutter and spark and, instinctively, the driver pulled out the wiring to prevent a fire. Within a second they had passed into and out of the mist, but this was not the end of the strange affair. They drove the remaining few hundred yards to their home, to find to their utter amazement that they had missed their television programme. In fact, they were well over an hour late for it.

Over the next couple of years the two adults started to have nightmares about the experience (hardly unexpected); these persisted and included strange alien beings. Their personalities also went through minor changes. Eventually they forced themselves to seek out ufologists, who arranged for medically supervised regression hypnosis. Under this hypnosis the couple were taken back to the event and this opened the floodgates. Apparent memory emerged to reveal that during the missing-time period they had been taken on board the now-landed UFO and given a medical examination. They had also been given a tour of the craft and told a great deal about alien philosophy. (11)

One can assume that the facts as now recalled are correct. Yet why was their memory blanked out? No emotional trauma allegedly occurred on board the UFO and in fact actually resulted from the loss of memory (on this hypothesis). On the

other hand, if it was deliberate policy by the aliens to remove memory why was it done so ineffectively? (And it happens often enough for technological incompetence not to be the answer.) The memory was instantly recoverable once hypnosis provided the trigger. It is necessary to ask major questions about all this.

An alternative solution might be that the worry over the strange time loss and the UFO sighting could have led to one or both witnesses filling in the gaps, as the mind loves to do. These two accounts may have become similar by normal means (forgotten discussions of the contents of each other's dreams). In any event, the regression hypnosis opened the door and a complete memory emerged (based upon the dreams) easing the subconscious tension that `not knowing the truth' created.

Hypnosis is not magic. Someone who is regressed is quite awake and able to avoid doing or speaking things that he wishes to avoid. In a sense it simply heightens awareness and sensitivity (and quite probably subjectivity). As Dr Alvin Lawson puts it: "Under regression the subject often reveals the truth. However, the truth he reveals is merely what he believes to be true, not necessarily the absolute and unvarnished truth. And thereby hangs many a UFO tale, and tale-teller." (12)

Leaving aside these issues for the moment, there are certainly instances where this technique is utilised inappropriately and/or in a potentially hazardous manner.

For example, it is not unheard of for Ufologists to 'learn' hypnosis and use it liberally in suspected "missing time" cases. However, this has considerable potential to put the witness at some risk and may also result in DIY "practioners" being the subject of extremely expensive (and personally damaging) litigation if the regression attempt encounters unforeseen difficulties. In at least one British case a witness hypnotised by a non-medically qualified person had an epileptic seizure during the regression - although disaster was happily averted in this instance. Therefore, if this technique has to be used at all in a ufological context - and there are many reasons why it should not be - the writers feel that regression hypnosis must only be conducted by a medically trained practitioner or those with direct medical support.

These will not be easy to find. Many of the cases you will have read involved the use of disinterested professional doctors charging anything from £50-£150+ an hour for their services. Unless the seeking parties are rich (or have a philanthropic friend) few can afford such a financial outlay! While attempts could be made to find a doctor willing to do it out of personal interest, experience shows they will quickly discover such work to be physically and mentally demanding and stressful, due to the amount of time they must devote to the patient. Additionally, once the identity of this person becomes known, other Ufologists will be quick to seek their help – a situation that will further add to this stress.

In any event, it should be made evident that hypnosis is not the "royal road" to breaking down perceived "memory barriers" it is sometimes promoted to be. While regression hypnosis often "recovers" UFO abduction style narratives when utilised in "missing time" cases, the reality status of such accounts are notably open to question. Hypnosis is capable of stimulating both fantasy and recall in about equal measures, and neither witnesses nor doctors find it easy to separate the two. (13) Fictitious alien abduction narratives have even been deliberately generated by this technique, although the relevance of this work in regard to actual "missing time" events remains controversial. Dr Lawson, who carried out such regression experiments, believes there is relatively little difference between UFO contacts deliberately imagined under hypnosis and those which are supposedly genuine. In other words it is feasible that even the most plausible abduction story has a psychological basis deep in the subconscious. (14) There is even some doubt as to whether the hypnotic state actually exists, this effect interpreted by some as representing only an extreme form of compliance. (15)

It is also notable that the abduction regression movement came into being around the same time as belief in repressed memories of sexual abuse began to be discussed elsewhere. Hence, it could be argued all these claims merely represent fashionable trends within a lucrative counselling industry! (16) It also seems unwise to burden witnesses with unpleasant "memories" that could later prove to be spurious, and it is never explained by regression hypnosis advocates how witnesses psychologically benefit from "re-living" an alien abduction scenario via this technique! (17)

As stated previously, it is also true to say that we do not know if anything actually happens during instances of so-called "missing time". All we really know is that such events feature a consistent grouping of odd features which some term the 'Oz Factor'; namely time becoming distorted and where environmental sounds disappear and the witness feels as if their mind is temporarily out of phase. However, if they simply lost consciousness after this a time lapse would result in which no "repressed" memories exist to be retrieved.

By way of acknowledgement of the above factors, since the late 1980's many British UFO researchers have supported a voluntary ban on the use of hypnosis (as noted by the *Code of Practice for UFO Investigators* detailed in **Appendix F**), generally termed the *Moratorium*.

There may be, however, instances where a witness wishes to be regressed and cannot be dissuaded in seeking hypnosis-based "counselling" for this purpose (even when the drawbacks of this technique as cited above are explained). Much of this is attributable to the presentation of this subject in the media, where hypnotic regression is often presented as a method capable of bringing "closure" to such an experience. In this instance, advise them to consult their General Medical Practice for recommendations in regard to medically qualified hypnotherapists, and (ideally) general stress

alleviation treatment. Another alternative is to take the witness to the scene of the encounter and relive the episode, with the witness 'creatively imagining' what might happen next. It seems to work just as well – although (as with hypnosis) the reality status of such an exercise is suspect.

In any event, when investigating such a claim make special note of the following:

- Why does witness believe he or she has "lost time"? Could there be a rational explanation to account for it?
- Make a chronological account of significant dreams and/or notable changes in the witnesses' emotional states following the experience.
- Note any lifestyle changes experienced by the witness following the event.
- Ask the witness, discretely, to discuss their basic health prior to the sighting, and (if possible) their life circumstances.
- If the witness reports any medical symptoms, record them as per Section 4.

How to acquire expert help:

After acquiring evidence relating to a special case, the next step is to locate a relevant expert to assist with interpreting the image, effect or trace concerned. Special care should be taken with this step, especially given the irreplaceable status of such evidence. An investigator should also consider the goal of such analysis. Ideally, its objectives will be to identify the nature of the fault/object, the composition of any trace, note any significant anomalies and suggest likely causes, if relevant. In some situations, however, financial concerns may limit such testing to only one or two of these goals.

So, then, how to find our experts...

It may be, of course, that an investigator has a good understanding of the special skills required, and has access to the necessary equipment required to conduct a competent assessment. Nonetheless, he or she should perform the data extraction and analysis stages separately (after all relevant information on the event has been collated), as the incident's claimed attributes will indicate what specific technical data is required. The investigators should also be confident that their work will withstand future scrutiny. Some critics may claim the investigators were biased towards proving the event had mysterious aspects, or wasn't sufficiently detached enough to maintain an objective, critical mindset. As a consequence, independent follow-up tests may well have to be conducted to satisfy such concerns – hence investigators adopting this approach should (where possible) collect **double** the quantity of samples in anticipation of this.

Those requiring or choosing to acquire an independent assessment have three options.

The first is for an investigator to locate one or more possibly useful professionals and pay them to conduct an assessment. There are, however, several issues potentially

associated with such an approach. To begin with, the professional(s) concerned probably have little actual experience in carrying out such work – but may be useful nonetheless to spot obvious faults, errors and causes. The second issue is that of expense – which can be prohibitive in regard to independent laboratory assessment of samples (probably costing in excess of several hundred pounds).

The second is to forge contacts with relevantly qualified people; either work contacts (or people associated with work colleagues), friends, family members or known local people with an interest in UFOs. This is a very useful approach, especially in relation to acquiring general advice relating to their particular sphere of knowledge. For example, a local gardening expert might be able to recognise normal problems that may create a suspect ground mark. However, in most instances they will only have a limited (or no) ability to provide detailed examination, unless they have access to a well-stocked workshop and/or laboratory! Care should also be taken that the person concerned has the acknowledged qualifications to carry out such work, which will be accepted as valid by subsequent (maybe even critical) commentators.

The last option is to directly contact a UFO society or similar body known to have access to relevant technical experts. Membership of such a group was once commonplace for those active within Ufology – but this is now becoming the exception rather than the norm. If you are already a member of such a body this should be your first option. Even non-members should be able to get some help, given the objectives of such organisations. However, a word of warning; some groups may not be what they seem! Some may be little more than UFO cults, while others might be in a state of stagnation, unable to offer any significant assistance despite the good intentions of their members. To avoid this trap, do some background research on them before entrusting them with irreplaceable physical evidence! UFO Internet mailing lists provide one excellent means to gauge whether a UFO group is actually capable of providing competent expert analysis! Such a forum may also locate an interested independent party in any event (but, again, make some checks beforehand....).

To conclude, these various types of high strangeness cases provide some of the greatest logistical challenges faced by UFO investigators. They also have the potential to shed light on the UFO mystery unlike any other. In that regard they justify the effort expended upon them.

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12: Some Case Studies

The objective of the final chapter in this section is to give you an example of several well-investigated cases. They will illustrate, I hope, the various processes explained in the previous chapters. I also hope they give you some idea of the level of reporting that is required so that, perhaps, you can aspire towards it with your work.

1: A Visual Sighting.

"What little Sally Johnson saw hovering above her in the air knocked her down flat... Eight-year-old Sally was riding a pony when she glanced up and saw the alien craft..." -Tamworth Herald, 16 December 1977

The two investigators in this first example are Martin Keatman and Stephen Banks. They, and this case, have been chosen for several reasons. Firstly, they were at the time of investigation still young men. Martin has an administrative job, whereas Stephen is an analytical chemist. Their specific interests in the UFO field are therefore somewhat different, but both possess a desire to produce first-class investigation results. Secondly, there were difficulties with the case itself. Not only are we dealing with very young witnesses, but technical hitches caused the necessity for improvisation in order to obtain a valuable result. The secret of good investigation is the ability to tackle any case that comes along despite apparent barriers, and to adapt one's methodology to suit its individual needs.

One of the biggest problems to arise over this case was a most unfortunate time delay between occurrence and subsequent investigation. This was unavoidable, and is one of those things that happens as a story filters very slowly down the various channels towards the people who ultimately investigate it. In fact, this case was first recorded in the pages of the *Tamworth Herald* for 16 December 1977, under the heading: "Sally and Gina are sure they've seen a UFO". However, it was seven months later that a field trip actually took place.

Part of the reason for this was the relative inaccessibility of the witnesses. They lived in a village called Clifton Campville, on the Staffordshire/Derbyshire border, adjacent to the picturesque Lullington Woods. There were no local investigators and Martin and Stephen had to make a fair sized journey (without private transport at the time). They arranged to camp for a weekend in a tent in the garden of the local rectory, giving them time to handle the case. They had been handed it by Tony Pace, research director of BUFORA (British UFO Research Association) after he had received a copy of the Press cutting.

Firstly, then, here is a description of the events - as pieced together from the testimony of the witnesses. Four girls (all aged either eight or nine at the time) were playing in some fields by the side of the village. It was Monday, 12 December 1977

and the time was 4.30p.m. It had been a dullish day with scattered cloud and a light breeze, and now evening was falling and a few stars were already visible.

The girls were named Georgina (Gina) Ward, Sally Johnson, Lynne Watkins, and Linda Broadhurst and they were taking turns to ride a pony that Gina owned. Sally was on the pony at the time, and Gina and Lynne were helping to walk it around. Linda was watching from a seat on a log some yards away (see Figure 12). Lynne spotted the object first, coming towards them fairly fast from the north-west. The immediate reaction of the girls was to think that it was an aircraft or helicopter, but as it came closer Sally said that it was a UFO. She became quite agitated at this point and fell backwards off her mount. Meanwhile the object was almost on top of them.

Sally was picked up by her friends and was unhurt. They also restrained Blackie - the pony - as it was in severe distress and was struggling to break free. They were afraid it might hurt itself on the wire surrounding the field if it panicked and fled. They thought it was the UFO overhead that was upsetting him, as it was now making a strange buzzing noise. Gina said it was not unlike the sound that bees make. The object virtually made a 'U' turn directly over the pony, before heading off in the direction it had come. They obtained an excellent view of it at this point.

It was shaped like an egg and white in colour, with a slight protrusion on the base. Across the middle were two bands (one red and one blue), and above these three round portholes. On top were two lights (one red and one white). They were attached to cylinders and slowly pulsating in and out. On the underside were four curved, dark legs. (See **Figure 9**).

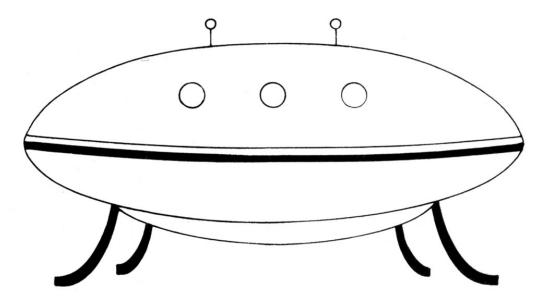


Figure 16: Composite drawing of the object seen by the four girls at Lullington Woods.

The object rotated anti-clockwise as it passed by at a height of about 60-70 feet (18-21 metres). The girls were, of course, absolutely terrified and when they saw it "flutter

down", like a leaf caught in a breeze, apparently floating towards a landing in the nearby woods, that was enough - they fled, leaving poor Blackie alone with his terror. As they ran away, however, they did notice that this 'landing' - if it ever occurred - was very transitory. Within a couple of seconds the object had reappeared from the depths of the woods and streaked away at a steep angle into the distance.

Naturally, when Martin and Stephen approached the girls they had only the 200-word Press report to go on, and this itself only referred to Sally and Gina as witnesses. They split up and interviewed the two girls separately, asking all the necessary questions and using a BUFORA report form as a checklist (the girls were not asked to fill these in). They did, however, ask the girls to write out their accounts in their own words and to draw what they had seen.

The existence of the other two girls was discovered in this process, and they were subsequently interviewed in the same fashion. After all the interviews were complete the four girls were taken back to the field where the incident had taken place and the investigators were able to take a series of site photographs, including the girls and the pony in the precise locations that they had been in on the date in question. At the site they were also able to get accurate bearings and elevations on the object's progress, and therefore work out meaningful estimates for the size of the object (this turned out to be only about 8-10 feet (2.5 - 3.00 metres) in diameter). The investigators also asked the girls to compare the colours they saw on the object with a standard colour chart. (1)

Next Martin and Stephen turned to the possible landing site, but this proved inaccessible in the deep woods. This in itself was useful information as it indicated the considerable unlikelihood of a landing having occurred. Due to this fact, plus those that there was a time delay and the terrain was unsuitable for traces, no further site investigation was conducted in the woods.

Naturally enough the investigators were with the girls long enough to make assessments of their personalities. They considered them all to be basically truthful, and were also able to add specific individual details. Since this is a real case and the witnesses' names are real I will not comment further on this. However, this did help to illuminate some of the minor discrepancies that were found to exist in the testimony.

Post-reactions of the girls were also examined of course. It was found that Gina was physically ill the next day (probably due to the stress of the situation) and Sally was so disturbed that she refused to sleep alone that night. The other girls were noticeably

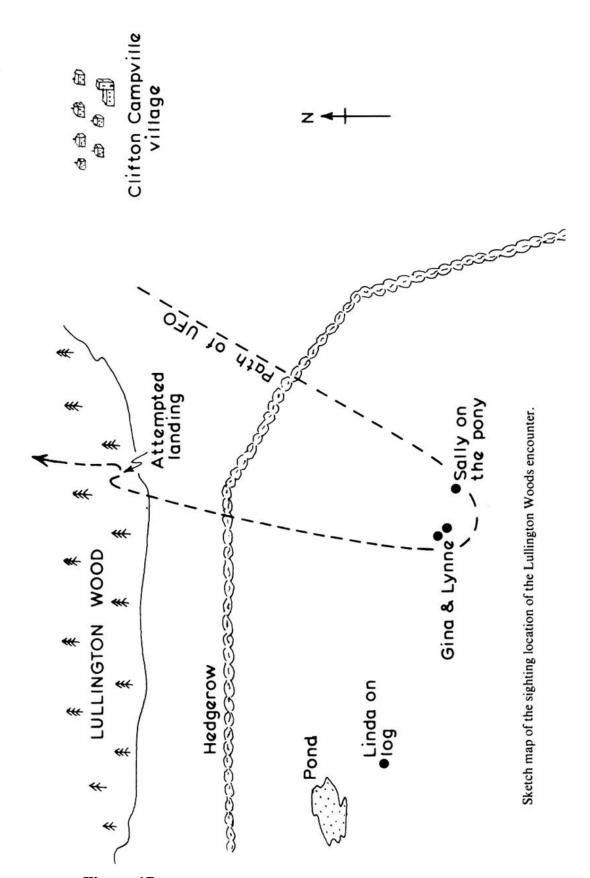


Figure 17: Topological sketch of the Lullington Woods Encounter

scared that evening also, but suffered no lasting effects (nor did the pony I am glad to say). Indeed, it was decided, after consideration, that it was not possible to conclude whether this was a genuine case of animal disturbance, since it is feasible that Blackie was just upset by the commotion caused by the girls. Two other horses were in the same field at the time (although admittedly at some distance away) and they suffered no disturbance at all.

It was the extreme upset that Sally displayed that prompted her mother to send for the police. A PC Wheeldon from Lichfield came around and spoke to Sally and was very friendly, putting her mind at ease by telling of a local instance where a police car had chased an apparently strange light. He also spoke to Gina, who was still at Sally's house. A reporter from the local newspaper arrived later and Sally says that he seemed to be laughing at her. For example, he asked, "Did it have UFO written on it?" However, the written report did turn out to be reasonably factual and did not display this ridicule.

When the girls were asked what they thought the phenomenon was most like the only thing that came up was a helicopter, sometimes seen in the area checking gas pipes. All the girls were, however, adamant that they had observed the object so well and at such close range that there was no prospect of a mistake. They were all familiar with this helicopter.

So - Martin and Stephen left the area feeling quite sure that they had something of value, but realizing that they now had to sort out the bits and pieces of information and start investigating. They had to check out air movements, but this was not simple in view of the time delay. The area was not on a normal overfly route. They were able to trace the owners of the helicopter and found that it had not been in use on that day. The police had also looked into aircraft possibilities within hours of the incident, and their investigation had also drawn a blank.

Obtaining an accurate weather record was again difficult due to the time lag, but in any event the girls had given consistent descriptions and these tied in with the weather details logged by the police in their report. Since no explanation in terms of weather phenomena seemed feasible this appeared to be sufficient. The police were an important data source in this case, since they had interviewed two of the girls within a couple of hours of the sighting. Martin and Stephen approached them courteously and were given every co-operation, including a photocopy of the original investigation report submitted by PC Wheeldon.

All in all the investigators did a very thorough job, and when they sat down finally to compile their report they had more than enough data to make a good evaluation of the case. The report stretched into forty A4 pages, and was finally put into a neat folder so that the outline was logical, concise and attractive.

The report itself was organized in the following way. It began, of course, with a title page and abstract of the contents. There then followed the list of chapter headings.

The next stage they included was detail of the investigation itself -how and when they interviewed the witnesses etc. Physical details of the environment and witnesses came next (including the subjective assessment of each witness by the investigators). They then put together a composite account, based on all the witness testimony, listing in tabular form the consistent features which they felt could be safely presumed from putting the individual stories together. The official police report was appended to this, plus comment on any amendments this made to the consistent data.

One, perhaps peculiar feature of this report was that the investigators chose to put their favourable conclusions here at this early phase. They followed it directly with the detailed interview notes on each of the four girls, including their handwritten statements and drawings. The girls each saw different aspects of the object more clearly, and so in addition to a full drawing of the whole object from each of them, individual 'blow-ups' of particular attributes of the object were provided by some of the girls.

The various appendices that concluded the report consisted of a blow-up of the ordnance survey map of the area (with witness positions and object motions demarked), a larger scale plan of the actual sighting area (with precise witness locations) and a sequence of eight photographs which gives the reader a good impression of the terrain and witness locations. At the end they added a composite picture of the object (see **Figure 16**) based on all the descriptions, and finally the Press report and copies of all letters exchanged (e.g. with the police and the media) relevant to the investigation. (2)

Martin Keatman and Stephen Banks were experienced investigators, and one would not expect everyone to be able to do as well as them right away.

2: A Photographic Case.

This following example of a "UFO" report associated with photographic evidence occurred on the 7th September 1979 in an outer Birmingham suburb called Acocks Green. This case obviously dates from a period when digital photography was not generally available, but nonetheless represents a good example of an INST report.

The first person to view the object was seventeen-year-old Theresa Duffy, who was changing clothes in her bedroom preparing to go out for the evening. It was 7.10 p.m. and the night was mild and dry with a totally overcast sky full of moderately high cloud. There was also virtually no wind. Darkness was beginning to fall, but there was still light about. During the sighting two aircraft passed over, presenting a stark contrast to the non-luminous object by possessing brightly flashing navigation lights.

Theresa first sighted the object over rooftops in the east. She took little note of it at first, presuming it to be just a bird. She continued dressing, but when she glanced out two or three minutes later it was still there, not having moved. At this point she called her mother. Jacqueline Duffy, apart from being a mother of four children, is a market researcher and has a keen interest in photography. When she first saw the object she was puzzled. It seemed to be dark and the same size as a pea held in front of one at arm's length. The shape was something like a trapezium.

After satisfying herself that the object was not moving in any way she became convinced that they were looking at something unusual. She then called her other three children, fifteen-year-old Claire and twins Paul and Michael (aged twelve). They all kept watch on the stationary object while she went to collect her camera.

Whilst she was out of the room the children say that the object seemed to move away slightly and then come back to its original position. By the time she had equipped the camera, and was ready to film it, the object was again receding. Her camera was a 35-mm SLR, but she had fitted a 135-mm telephoto lens and added a times-three converter giving a fairly substantial telephoto lens of about 405 mm. She had the camera set at f.3.5 aperture (quite wide open) and a shutter speed of a forty-fifth of a second. The telephoto lens, however, greatly reduced the effective aperture and the final image is slightly dark.

In view of these factors, and that of a lack of a tripod with such a large effective lens size, it is surprising that such a good photograph has resulted. The object is seen clearly in focus against the background clouds but the top of the opposite roofs are a little out of focus. There is no sign of camera shake and the difference in focus is due to the fact that the camera would not focus sharply on anything within about 120 feet or so of the lens. The rooftops are only about 70 feet away. Unfortunately, the one shot Mrs Duffy could take was in fact the last on the film. This infuriating claim is heard quite often and one begins to doubt that chance should preclude so many multiple shots (which are of much greater value and make the hoax considerably easier to uncover). However, in this instance there is no reason to doubt that this genuinely was so. After the shot was taken the object seemed to recede into the distance and slowly drop out of sight behind the rooftops. It had been in view for ten minutes.

Investigation was undertaken by John Ledbetter of the West Midlands group UFOSIS (UFO Studies Information Services). He obtained statements and drawings whilst the film was away at Kodak for processing. Unfortunately, they misplaced it and it was not returned for some weeks. It is possible to read a sinister conspiracy into this, but in fact it is common for things to go astray at this time of year (when many people are sending in film after film of holiday snaps).

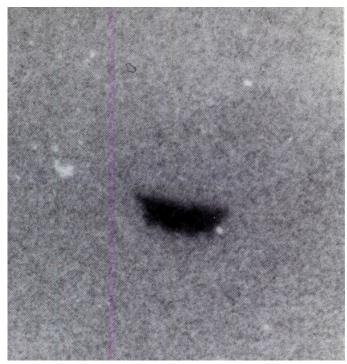


Figure 18: Enlargement of object seen by the Duffy family over Birmingham in September 1979.

When the film was returned the negative was examined under a magnifying glass, and there were no signs of retouching of the image. The object appears to be essentially the same as the witness drawings indicate, but shows no protuberances or features other than a more or less uniform solid density even under fairly large magnification. Because the image is sharp a good degree of enlargement is possible.

All the indications are that this photographic image is of a real object in the sky. It appears to be further from the lens than the estimated distance for sharp focusing - i.e. 120 feet, but how much further is impossible to judge on the evidence. If it were just beyond, its size would only be in the order of 1-2 feet. Naturally, it could be considerably further away and much larger (at one mile distance it would be about 40 feet in diameter). There is a possibility that it could be a minute particle close to the lens, but the absence of telltale signs seems to negate this. In any case, there is no reason to presume that all five witnesses are perpetrating a hoax. On preliminary analysis we are left with the conclusion that it is a genuine photograph of something - but of what?

A bird is clearly out of the question. Apart from the fact that it's the wrong shape, here is no evidence of movement on what is rather along exposure time. Aircraft and helicopters are similarly out of the reckoning. The only sensible prospects come when we consider either a balloon or some form of kite. On face value the kite hypothesis seems to fit well, although it would have to be an unusual type of kite. However, even on the magnification provided by the telephoto lens there is no sign of string and at the distance needed for this to be invisible the kite would have to be large indeed. More fundamental factors are the lack of wind (confirmed by weather records) and

the total stability during the observation period. If it were a balloon some of these would be overcome, but the shape is peculiar indeed and one would have expected Birmingham airport to have known of its passage (they had no record of any such thing).

When Mrs Duffy kindly made the negative available to me I took up the kite theory with her and she admitted that it was a possibility (although the stability was the main thing that worried her). Important factors she brought out, willingly, were that three quarters of a mile from their house there is a park where kites are sometimes flown, and that she had been advised that really large kites can fly with next to no wind. At this distance we would be talking in terms of a kite with a 20 foot wingspan or more, but it is not impossible and on the basis of present evidence seems to provide one of the best solutions to this otherwise puzzling case.

3: A High Strangeness Case – Livingston, Scotland, 9th November 1979.

In conclusion I will cite the investigation into a now well-known high strangeness case involving an apparent close observation of a "UFO" and associated physical traces. This event took place on Friday, 9 November 1979 at 10 a.m. in a wooded area just outside Livingston, West Lothian, in Scotland. The case received media publicity on the Sunday and UFOIN arranged for investigators Martin Keatman and Andy Collins to go to the site as soon as possible (which was the Tuesday). They spent three days in the area following up all the leads available, and a remarkable story emerged (3).

The witness, Robert Taylor (then sixty-one-year-old) at this time worked for the forestry department of the local development corporation. One of his tasks was to patrol an area of woodland not far from the M8 Glasgow to Edinburgh motorway. He had just finished his coffee break and driven his van to the edge of the particular spot he was to check for stray animals. He continued on foot, with his dog (a Red Setter called "Lara") running loose nearby sniffing happily at the various local smells.

Bob turned into a clearing and suddenly, unbelievably, he was standing just feet away from a dome-shaped (or possibly spherical) object that was just sitting quietly on the ground. It was about twenty feet wide and a dull grey metallic colour, with a rim near to the base from which sprang several vertical antennae or propellers. There was neither sound nor sign of life.

Mesmerized, he stood there for perhaps a minute, just gazing at this fantastic sight. Then, incredibly, portions began to fade in and out and he could momentarily see the background through the object. Before he knew where he was two grey

spheroids behaving like robots, had come out of the object and rolled or bounced towards him. They were about a foot in diameter and had several spikes sticking out so that they looked not unlike landmines from a past war. As these spikes embedded in the wet earth a sucking sound was heard.

In seconds the two objects had surrounded him. Three things then happened at once. He felt a tugging on his legs; he half smelt, half tasted, a somewhat foul gaseous emission; and he collapsed unconscious face forward onto the ground. As he did so he thought he heard a swishing sound. He came round in what seems to have been only a few minutes, as no substantial time loss occurred. His dog was



Figure. 19: A representation of the "UFO" and two spheroids encountered by Bob Taylor at Livingston, Scotland in November 1979. (image © David Sankey, 2007).

by his side, excited and nervous, but the dome and spheroids had gone. Taylor believed that the dog frightened them off. He tried to stand but his legs were like jelly. He also had a severe thirst and a pounding headache. These are all typical post-anaesthetic symptoms, as Rosalind Warrington points out. He finally dragged himself towards the van, without noticing as he left the ground where the object had been.

At the van he tried to radio his base for help, but hard as he struggled he could not speak. He then tried to drive home but was so to have a bath, as he was covered in mud from his fall. As he did so he noticed that his trousers were ripped at either hip. His employer was contacted and simply advised that Bob had been attacked.

Things now began to move faster. His employer contacted the police and a doctor also came around. The doctor examined him and suggested a precautionary X-ray at the Edinburgh Royal Infirmary. He spent most of the afternoon there, but left when he was called for `tests' and realized that the doctor had suspected he was hallucinating due to a head injury (which he did not have).

Meanwhile, the police had visited the site and sketched all the clearly visible traces that they found. They had also fenced off the area in an attempt to keep out sightseers - although this was not very effective. In addition they took away Bob's trousers for forensic analysis. They were clearly treating the matter with great seriousness. Indeed seven police officers (including a CID man) were on the site within minutes of the call.

Little else happened between Friday evening and the following Tuesday. The witness went away on a prearranged trip and so avoided the media publicity which he himself did not attract. Steuart Campbell - at the time a BUFORA investigator - visited the site over the weekend and commenced his detailed investigation of this case, subsequently published in 1982; followed in 1986 by his theory that the Livingston event was instigated by a mirage of Venus and two other astronomical bodies (4, 5)).

Unfortunately, heavy snow had fallen on the Monday and the traces were covered by a six-inch layer. This turned out to be a blessing in disguise because it preserved them perfectly - whereas three or four days of inconsiderate local sightseers would have totally obliterated them. After getting the complete detailed story from the witness and all the other parties involved, the investigators set about the traces. With the help of a now fully recovered Bob and some of his colleagues from the forestry department they meticulously moved the snow piece by piece and uncovered the still prominent traces. They first assured themselves that they were the real thing and not the effects of the snow. They had been able to photocopy all the drawings made within hours of the landing from the police notebooks and had also asked all those who had seen them on the Friday to draw them from memory before the snow was removed. All of these drawings matched, more or less perfectly, the markings that now lay before them.

Of course their first step was to photograph them from various angles, allowing for the interplay of light. As with a UFO photograph there is rarely more than one chance before the marks vanish forever and so it must be done correctly. An SLR type camera must be borrowed if all you have is an instamatic or a compact, since this would not allow good results if the lighting conditions were poor. It is also an interesting idea, especially if traces are very recent, to take some infra-red shots (and/or readings) at night. This records the difference in temperature and may show up any major anomalies at the landing site.



Figure 20: Ground traces at Livingston, Scotland. On recovery after his Close Encounter Robert Taylor found these strange step-like tracks in the thick grass at the point where the UFO allegedly landed

Martin and Andy next commenced accurate measurements and plotting onto maps. Things such as the depth of the impressions could not be overlooked. In this case there were three separate locations to consider, which somewhat complicated the task. Firstly, where the object had apparently been, there was a circular area with some strange step-ladder tracks inside. These seemed to bear no relationship to the description of the object seen. Secondly, where Bob Taylor had fallen, there were what looked like 'drag marks' as if he had been pulled forward with his feet moving along the earth and gouging it out. These were in two parallel bursts which, if that is what they were, indicate that he was pulled along about one third of the way towards the object. Finally, between these two, were about twenty or thirty holes which were certainly in accordance with the spikes from the spheroids indenting the ground on their way to (and presumably from) the witness.

Unfortunately the earth was still damp with melting snow and attempts to make plaster casts failed. Indeed, one mould was left overnight and, as if to emphasize yet another problem ufologists face, when the investigators returned the next day some joker had placed a tin can right in the middle of the still unmet plaster. Luckily, however, it did prove possible to dig up and preserve intact one of the holes. Aside from all this various soil samples from the site and nearby controls were taken. These were sent to Leeds University where UFOIN then had assistance in sample analysis work.

The investigators' job did not stop here. Living with the witness they were able to observe his post-reactions. Whilst the strong physiological effects disappeared within hours, there remained a scratch mark on one hip (precisely where the tear in the trousers had been), which was still visible on photographs taken a few days later. He was also somewhat off his food, as incidentally was the dog (the animal's only notable reaction). This persisted for about six days after the encounter.

The final piece of this particular puzzle was the trousers. With the kind assistance of the Edinburgh police the two ufologists were allowed into the forensic laboratories to see the trousers and talk with the man who had conducted the tests. It seems that the trousers were police-issue and therefore unusually thick. It would have required a considerable force, from something like a pair of pincers, to cause the upwards gash on either side. The tears were consistent with what one would expect if the unconscious man had been dragged head first towards the UFO. As a final teaser it was discovered that on the front of the trousers was a patch of white powder. Analysis proved this to be maize starch - although Bob Taylor had no idea where this could possibly have come from.

Sadly, Robert Taylor died in March 2007 – maintaining the validity of this experience throughout the remainder of his life (6). Steuart Campbell's explanation aside, the "Livingston incident" is still generally considered unexplained, and represents one of the UK's most significant and best investigated "Close Encounter" events.

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Appendix A: UFO Interview Checklist

This Appendix is only intended to be a guide - the widely different nature of various UFO sighting claims will require a flexible approach from investigators. Nonetheless, the following guide to the questions you should put to a witness should provide you with the basis of the data you ought to obtain on all cases, but there will inevitably be more that you will require, as each individual case dictates. Remember that this is a guide for you, not the witness!

- 1. Date, time (GMT or BST), and exact location of witness when phenomenon was observed (an Ordnance Survey reference is required, ideally acquired via a hand-held GPS if possible when investigator visits site).
- 2. Compass direction of object when first and last seen (exact bearings should be taken with the witness on site).
- 3. Any irregularities of the above flightpath (stops, direction changes etc.).
- 4. Elevation of object when first and last seen (again, exact readings on site).
- 5. Duration of sighting and method used to estimate this.
- 6. Witness description of weather conditions (especially cloud cover, wind speed, temperature and any unusual features).
- 7. If it was dark, were the stars or the moon visible? If so, what was the moon's phase?
- 8. If it was daylight, where was the sun in relation to the witness?
- 9. Description of the object: shape, colour, size (compared to known object and as measure of a coin held at arm's length or was it just like a star?).
- 10. Description of any sound heard.
- 11. Did the object look: sharp, solid, metallic, fuzzy?
- 12. Brightness of object (compared to the full moon).
- 13. Any changes in any of the above features during the sighting.
- 14. Manner of appearance and disappearance of the object.
- 15. Manner of movement compared to: aircraft, rocket, balloon.

- 16. Did it cause any effects on the environment or the witness?
- 17. Was it observed through any form of glass, or opening, or instrument?
- 18. What identifiable object did it most resemble, and why does the witness feel it was not this object?
- 19. Name, address, age, occupation, and special interests of the reporting witness.
- 20. Any physical defects (e.g. hearing, eyesight).
- 21. Any experience in observing aircraft, satellites etc.
- 22. Has the witness read any books or magazines about UFOs or related phenomena?
- 23. What were the feelings experienced by the witness before and after the experience?
- 24. Did the witness notice anything unusual about his or her surroundings during the sighting?
- 25. Has the witness seen any strange objects in the past?
- 26. Has the witness had any strange experiences in the past?
- 27. To whom was the object reported, and why to this person in particular?
- 28. Did the witness talk to anyone about the sighting before the interview, and if so, what reaction did he encounter?
- 29. What were the witness's feelings about the object whilst viewing it?
- 30. How does he feel about it now?
- 31. Did the witness suffer any kind of after-effects?

Appendix B: UFO Investigation Checklist

Again, this Appendix is only intended as a guide to some of the basic steps to take and should not be regarded as a rigid framework.

- 1. Speak to the reporting witness and ask him to write out an account of his observation as soon as possible (including relevant sketches).
- 2. If other witnesses exist and are traceable ask them to prepare independent written statements and sketches.
- 3. Arrange separate witness interviews as soon as possible.
- 4. Visit the site (with witness if possible) and take measurements and photographs.
- 5. Analyse the site (either whilst there, or by reference to an Ordnance Survey map of the area). If a "special" case recover and record data as per guidelines in **Chapter 10**.
- 6. Contact weather centre for the appropriate data.
- 7. Contact local airports (civil and military if applicable) for air movements and any balloon crossings. Examine air corridor map(s) for further clues.
- 8. Consult with an astronomical society/relevant Internet site /astronomical computer program for any major astronomical phenomena which may be relevant.
- 9. If not already covered, check into the phenomenon which the witness said his UFO most closely resembled.
- 10. Consider other possible IFO candidates (see chapters 8 and 9) for anything else which could be feasible.
- 11. If a "special" case, consult any necessary experts and await findings.
- 12. Write out your report on the incidents, but without any conclusions.
- 13. Discuss your report (preferably after the witness has read it) with a person who is reasonably intelligent and sceptical of UFOs. If he comes up with any queries which you have not checked into do so.
- 14. Write your reasoned conclusions on the case.
- N.B. If there is more than one witness, it is essential to obtain all the above information for each witness at a separate interview if possible. Also obtain, as suggested in **Chapter 8**, sketches of the object and its motions against the background scenery from each witness independently.

Appendix C: Personal Sources Checklist

These are the basic sources, the addresses and telephone numbers of which all investigators should have immediately to hand.

ASTRONOMICAL CASES:
AIRPORTS (LOCAL):
GARDENING (Physical Traces):
LOCAL PRESS:
MEDICAL EFFECTS:
MECHANICAL EFFECTS:
PHOTOGRAPHIC CASES:
RADIO NEWS STATIONS (Local):
RADIO EFFECTS:
TV NEWS STATIONS (Local):
UNIVERSITY CONTACTS/OTHER:
WEATHER CENTRE:

APPENDIX D:

A UFO investigation "toolkit".

The items listed below provide a checklist of (mostly) basic equipment of use during field investigations. An asterisk denotes an essential item used in virtually all types of casework. Equipment requiring specialist skill to correctly use/interpret (such as Geiger counters, etc) are recommended only to those versed in their use, and are hence not detailed here.

Items marked with an ampersand ("@") should be worn when taking samples and/or handling material(s) of uncertain provenance. Thereafter, they should be carefully removed and placed in a sealed, thick and <u>unused</u> plastic bag, remaining there until analysis indicates the substance sampled/encountered poses no hazard!

Likewise, avoid handling any object or sample (and only utilise an unused AND clean container/bag), to reduce risk of sample contamination.

Stationary Items:

- *A4 notebook (lined) for writing.
- *A4 notebook (plain) for drawing.
- *General items (drawing compass, colouring materials, pens, pencils, pencil erasers, protractor, rulers and a scientific calculator).
- Plastic bags; various sizes; fairly thick, clean, unused and with ziplock seals (for soil samples, etc.).
- Plastic bag, large (unused and clean) to contain clothing etc. after sampling.
- "Spacepen" or similar (ideal for writing in an open-air, wet environment).
- Waterproof markers (preferably several).

Outdoor Items:

- Binoculars
- *Clean indoor shoes/slippers (for entering a witnesses' house, etc. following a field trip).
- Coveralls @.
- Facemask @.
- Flashlight.
- Gloves @
- Goggles @.
- *Outdoor clothing (good waterproofs, high boots several layers of clothing if investigating outdoors during a cold spell).

General Items:

- Colour chart (ideally, a Munsell chart but these are very expensive a good paint colour chart is a satisfactory alternative).
- Comparison objects, various (i.e. pushpin head, aspirin, 1p, 5p, 10p, 50p), for comparative arms length angular size, possibly stuck onto a piece of Perspex for ease of use).
- *Compass (magnetic)
- Clinometre manual, analogue or digital format, for determining angular elevations.
- Digital (or analogue) camera.
- Handheld GPS unit (for quick determination of NGR/Latitude-Longitude of locus, sample zones and other significant "spot" locations).
- Hammer (ideally Geologist type).
- *Interview question checklist.
- Line-level and plumb-bob (for vertical measuration).

Maps:

- *1:25,000 scale (or smaller scale) map of sighting locus.
- *1:50,000 scale, showing area around sighting locus.
- Magnifying glass (the more powerful, the better).
- Pipe, plastic (thick walled) 8-12cm dia, 60 cm or so in length (for sub-soil samples)
- Pointing trowel (small, for soil samples etc; very robust and rarely bends!).
- *Tape measures (5m handtape and 50m reel tape).
- Scales: ruler with high contrast scale and 1 meter pole (ideally 0.5 metre delineated, first section black, other white or buy a surveyors' ranging pole); for indicating scale within photographs.
- Swiss army penknife (the more attachments, the better).
- Voice recorder (for memos, and with witnesses' permission interviews).
- Video camera (as per voice recorder also useful for panoramic views of sighting locus).
- Shovel (folding trenching tool style should suffice).
- String (large ball).
- Stopwatch (use of wristwatch equipped with this function is satisfactory).
- Tent pegs (ideally around 30).
- Tweezers, tongs and probes (for fine handling of suspect material; anything serviceable will suffice).

APPENDIX E: LAYING OUT A SURVEY GRID

The investigation of alleged physical trace events may be aided by laying out a **survey grid** over the area concerned. These assist the drawing and photography of such sites, and also provides a framework for acquiring accurate spatial referencing of specific features.

1: Determine vertical and horizontal exterior of grid (ideally via a reel tape measure): decide what size gird squares to use; i.e. 1 metre, 2 metre, 5 metre or 10 metre.

2: Subsequently mark out exterior of grid using high visibility tent-pegs

3: Start to define the various squares of the grid. (30 such pegs should suffice for most grids). Check the regularity of each square by measuring them diagonally, from corner to corner. If accurate this distance should equal **square size x 1.414**: or 1.414m (1 metre squares), 2.882 m (2 metre squares) 7.071 m (5 metre squares) or 14.14 m (for a 10 metres square).

5: When correctly laid out, fix the grids' position by determining the distance (and angle) of various nearby features of at least two exterior corners of the grid; ideally using two such features per corner. Furthermore (if available), use a handheld GPS to record the location of each grid corner.

6: Decide on a co-ordinate system for the grid and what measurement conventions to use for it. One idea is to refer to each row of grids using a letter and each grid-square within that row with a number (i.e. "Row A, Grid 4").

i.e.:

	1	2	3	4	
A	S	S	S	S	(S = Square).
B	S	S	S	S	_
\mathbf{C}	S	S	S	S	

Whatever you decide, keep to it throughout the survey to avoid confusion!

7: Thereafter, determine the location of features lying within the grid by their distance (for example) right and downwards from the relevant grid-square's upper left hand corner – use a hand-tape/tape measure to define this, stringing another tape measure along the relevant grid-square edges to form a measurement datum-line.

8: Record (or "book") all measurements in sequence as soon as you determine them, doing so in a relaxed, calm manner. Try to avoid distractions!

APPENDIX F:

THE CODE OF PRACTICE FOR UFO INVESTIGATORS

The **Code Of Practice** (CoP) was created by a series of meetings across the UK during 1981/2, during which many then existent UFO groups met to self-determine standards of ethics, conduct and responsibility. It advises and sometimes directs upon appropriate actions when dealing with witnesses, the authorities, other UFOlogists and the public. This voluntarily agreed Code helps to preserve common sense, moral behaviour and responsible principles within a field too often riddled with self interest and lack of concern for those affected by UFO activity.

The CoP was originally drafted by the following organisations - UFO Investigators Network (UFOIN), British UFO Research Association (BUFORA), Northern UFO Network (NUFON), Manchester UFO Research Association (MUFORA later renamed NARO), plus several new defunct associations - NUFOIS (Nottingham), SCUFORI (Swindon) and PROBE (Bristol). Contact UK also participated in some stages of the discussions. The Code was offered to the community at home and abroad and was accepted in a modified form by some other bodies including the paranormal research team ASSAP.

The Code has since been updated on several occasions by both UFOIN and BUFORA. The version below was agreed by the founder members of the short-lived revival of UFOIN in 1999; the version presently followed by BUFORA A.I's from the early 2000's onwards is fairly similar.

The Code of Practice for UFO Investigators

General:

The CoP is intended to offer guidance, advice and where appropriate mandatory actions to preserve rational, objective and ethical investigation of UFOs and witnesses.

- **B**. The version that follows is agreed by the group adopting this Code to be a binding set of principles for all team members to follow.
- C. The CoP should be adhered to wherever possible by all the group's investigators. Any person may bring to the attention of the group an alleged breach of this Code by one of its team. Both the complainant and the group member accused will have the opportunity to offer a statement to all other group members, who shall decide by majority vote on any action deemed necessary.

Definitions.

Except where specifically stated, words shall have the commonly accepted meaning, all cases of doubt to be resolved by reference to the *Concise Oxford English Dictionary*.

- (a) Reference to the singular includes the plural, and vice versa.
- **(b)** *Must* indicates mandatory action on the part of the investigator.
- (c) Shall or should indicates strongly recommended (but discretionary) action by the investigator.
- (d) *Desirable* indicates preferable action by the investigator.
- (e) A *original* report is the report made and filed by the investigator and may contain confidential material. An edited report is one cleared for general distribution and publication, and may have been edited or rewritten. It must not contain any confidential material.
- (f) Confidential information shall mean information not to be disclosed according to all existing laws of the land regarding personal information and its publication, as well as material deemed confidential by clauses of the CoP itself.
- (g) *Publication* includes UFO and other periodicals, newspapers, circulars, news media, books, and electronic media (e-mail, web sites, etc.).

Code of Practice.

This Code Of Practice consists of three sections:

- Responsibility to the witness.
- Responsibility to the public.
- Responsibility to UFOlogy.

1: - Responsibility to the Witness.

- **1.1** The identity of the witness to a UFO event must be deemed confidential and can not be disclosed especially to media sources such as TV and newspapers unless specific and recent consent is obtained from the witness. Confidential material includes the name of the witness, home address or place of work, telephone numbers, or other data that may allow the identity of the witness to be ascertained.
- **1.2** The witness should be counselled about the potential consequences of the public disclosure of details such as those above. Their decision on disclosure or non disclosure must be regarded as binding.
- **1.3** Insofar as is practical, all interviews shall be by prior appointment. If a witness declines immediate assistance via an interview or appointment then their wishes must be accepted.
- **1.4** It is desirable that all interviews shall be conducted by two investigators, and in the event of the witness being a woman or minor (under 16 years of age) that one of those present is female.

- **1.5** All requests by the witness (or, in the case of a minor, a parent or other responsible person) for a third party to be present during an interview must be honoured.
- **1.6** If the witness refuses to co-operate in any way, or to meet another investigator, their decision must be accepted, the option for further contact resting with the witness.
- **1.7** An investigator must not enter or attempt to enter any private property without the permission of the owner, tenant (or occupier) or authorised agent.
- **1.8** Any damage to property caused by an investigator during the course of an investigation (for which the investigator admits liability) shall be made good by that investigator without the need to be asked to do so.
- **1.9** Specialised techniques, or equipment unfamiliar to the witness must not be used during the interview other than by clearly stated consent (which should be obtained in writing). The use of any such aid or aids shall be restricted to interviews conducted by fully qualified practitioners with a publicly acceptable mandate to use such methods.
- **1.10** The witness is entitled to be informed of the conclusions reached by the investigation if he or she so requests.
- **1.11** Due consideration should always be given to the health and welfare of the witness. If it is ever suspected this may suffer by continued investigation work must be suspended or abandoned forthwith.
- **1.12** The Code Of Practice regards the technique of regression hypnosis to be wholly unsuitable during the investigation of a case. It must never be used. If a witness approaches and requests such a method the investigator is obligated to explain the reasons for our decision not to employ the technique. They must acquaint the witness with the generally accepted psychological debate regarding its nature, possible long term effects such as adaptation of memory and our absolute ban upon its use. If the witness insists upon taking the matter further they should be directed not to any other UFOlogist but to a medically qualified practioner. If the witness still then decides to proceed with regression hypnosis via another source the investigation must be concluded.

2: - Responsibility to the public.

2.1 All investigators must co-operate fully with police and any other official body, particularly in circumstances which may affect national security or matters of life, death and injury to other persons.

- **2.2** If, during any investigation, a situation is encountered which is, or is liable to become, dangerous to the general public, or result in damage to property, the investigator must without delay notify the police or other responsible body and take all reasonable steps to protect public and property.
- **2.3** Investigators are reminded that they have no special privilege and may be required to disclose confidential information to a court of law. If such matters of jurisprudence intervene other clauses of the CoP are temporarily superseded.
- **2.4** UFO investigators must at all times weigh their responsibility to inform the public about UFOs against the often-different requirements of the news media. The issuing of unsupported statements, expression of theories lacking in evidence and non objective speculations about cases should be refrained from. If an opportunity is taken to offer a rational perspective on the phenomenon via a public forum it should always be recalled that you are representing both your group and scientific UFO research. You must strive to do so in a responsible manner.
- **2.5** The credibility of a witness or colleague should not be impugned in public unless the evidence and community interest provides an overwhelming mandate. You should always be prepared to justify this act, if necessary, to the rest of the UFO investigation team.

3: - Responsibility to UFOlogy.

- **3.1** The free flow of information shall not be restricted for personal gain. UFO investigators will inform colleagues of their work in progress and allow its use upon publication by other responsible members of the UFO community. This is subject to the provision that these other parties reciprocate with due credit to source. UFO members may use information for their own purposes, e.g. to write articles and books, but must not inappropriately delay release of information to the UFO community to further such aims.
- **3.2** Full credit must always be given to colleagues and other sources whose work you draw upon, unless they have expressly requested not to be identified.
- **3.3** Interviews conducted during an investigation shall where practicable be recorded on audio tape, video tape or other recording device. However, if the use of a recorder is objected to by the witness (or other responsible person in the case of a minor) written documentation should be as thorough as circumstances allow. This should also be properly transcribed as soon as possible after the interview.
- **3.4** All case reports should indicate the persons present, their status, and their relationship to the witness/witnesses during any interviews.

- **3.5** Any information, confidential because of factors inherent within this Code, must not be made available in the edited report. Only the edited report should be made available for external use.
- **3.6** The identity of a witness must be regarded as confidential and not included in the edited report unless the witness initiates self disclosure. If any doubt persists protection of the witness should override all other considerations. To fully protect witnesses in sensitive occupations, investigators may need to restrict from some parts of UFOlogy details of the time, place and other circumstances surrounding the incident especially those that might allow the tracing of a witness who has required non disclosure of their identity.
- **3.7** The first priority of any investigation must be to allow a witness to tell their story without intervention. An investigator should not discuss personal theories regarding the case or the phenomenon with a witness during the course of the initial investigation. If such details are discussed at a later point they should be emphasised as a theory and supported with any objective evidence available. In the report to the UFO community personal theories regarding a witness or a case should be clearly indicated as such and separated from the main facts of the investigation.

Declaration of the adoption of the Code of Practice.

I, the undersigned, have read and understood the Code of Practice for UFO investigators and state that:

- 1. I will conform to its clauses and principles when engaged in UFO investigations or research; and -
- 2. I understand that I may be required to give account to the rest of the group should a breach of the Code be alleged for which I am held responsible.

Signature:	Date:	
Full name (printed):		

APPENDIX G:

Selected UFO Bibliography

(For academic books relevant to investigation procedures see references in Chapters 8 through 10)

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