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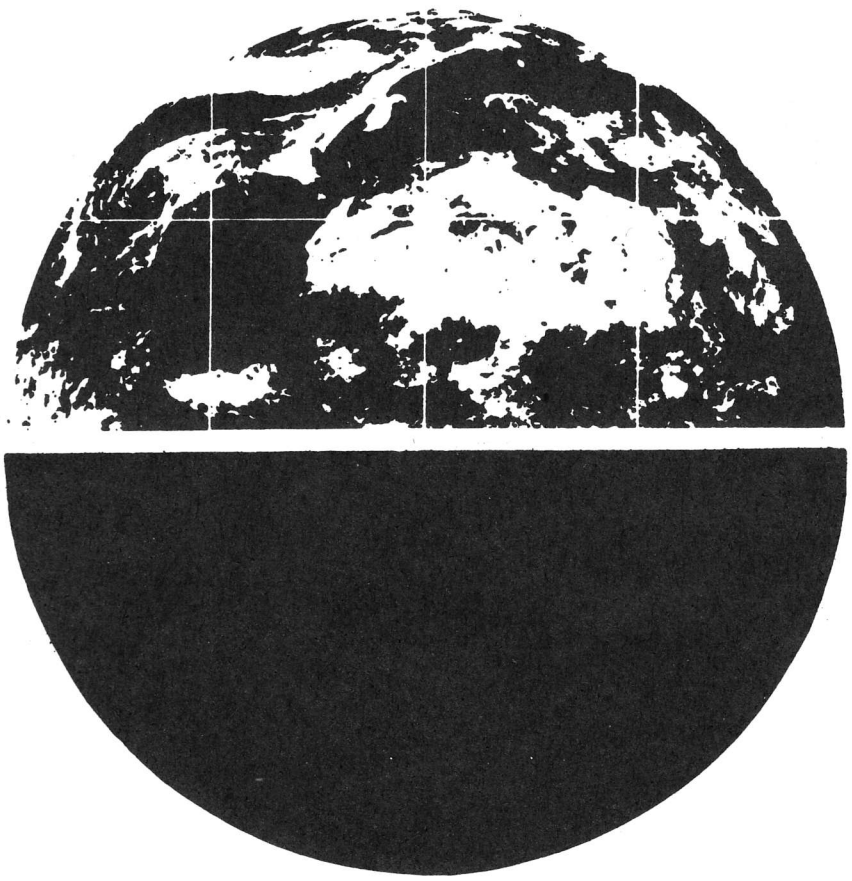

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THE JOURNAL OF TRANSIENT AERIAL PHENOMENA
Devoted to the scientific study of unusual aerial phenomena.

March 1989 Volume 5 No. 4

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E D I T O R I A L

Steve Gamble, Director of Research.

As mentioned in the Editorial for the previous edition of JTAP (1), this is the last issue of JTAP for which I will be editor. At that time I stated that the BUFORA Council were considering a number of options regarding the future of publications. From the Editorial in the January 1989 issue of the BUFORA Bulletin many people would also have noted that the Bulletin has also published its final issue.

After much consideration the BUFORA Council has decided to put its efforts into producing a more up-market single publication called 'UFO Times'. This will combine the best features of both the Bulletin and JTAP with additional material. The Editor of the UFO Times will be Mike Wootten, who will be supported by an Editorial team. (You will not be getting rid of your present JTAP Editor that easily as he will be serving on the Editorial team for UFO Times!).

One particular problem that has existed with JTAP has been that if there are articles (such as Paul Fullers report on the Circles phenomena) which need spliting into several parts, or there are exchanges of correspondence, the reader has to wait at least six months for the next instalment. With the new bi-monthly magazine this situation will be much improved.

This being the last Editorial in JTAP, I should like to take this opportunity to thank the many supporters there have been for this project over the years. Whilst it would be impossible to mention everybody, I would like to mention a few of the more regular contributors. As I spoke about the Editors of JTAP in the previous Editorial I will not repeat that here.

First mention must go to the long serving members of the Editorial Board who have not only assisted me as Editor but also my predecessors. In this category I must mention Arnold West (current BUFORA Chairman), Bob Digby (a former BUFORA Chairman and now ICUR Chairman), Robin Lindsey, and Consultants John Shaw and Richard Beet (himself a former JTAP Editor). Particular mention must go to John Barrett. Not only did John serve on the JTAP Editorial Board, he did much of the production work for JTAP for several years, whilst also Editing and producing the BUFORA Bulletin and other publications.

Next mention must go to the regular contributors who have provided much interesting material for JTAP to publish. A shortlist of these must include John Armitage (with his Atmospheric Phenomena Log), Paul Fuller, Ken Phillips, Roy Dutton (a regular contributor of articles and correspondence) and Steuart Campbell. Steuart

(This issue marks the end of Volume 5 of JTAP)

has provided numerous articles on a wide range of topics ranging from his investigation of the Livingston Encounter of November 1979, through his examination of evidence for a Ball Lightning theory to explain UFO reports, his regular Ball Lightning Update column and more recently his articles examining evidence for an alternative (astronomical) theory to explain UFO reports. Steuart has also been a regular contributor to our correspondence columns.

It had always been the hope that JTAP would publish research orientated articles so mention should be made of some of these. Special mention should be made of the work of Peter Hill both a former Editor of JTAP and a former Director of Research of BUFORA. Peter spent a great amount of both time and effort, particularly through the pages of JTAP, promoting the correct use of statistics and the importance of proper experimental design.

Another statistian who has been extensively involved with JTAP has been Paul Fuller. His work on the investigation of Circles Phenomena is a very good example to researchers everywhere.

On a slightly different tack JTAP has published over the years a number of articles outlining the work of Ken Phillips and Alexander Keul in witness centred study. This is a very interesting area which can basically be summed up as is there anything which (apart from the UFO sighting) makes the UFO witness different from the rest of the population. This is an important part of every UFO case which is often overlooked. Every case consists of the report and the witness who makes the report. Phillips and Keuls work has primarily been to develop the Witness Anamnesis test.

No final Editorial would be complete without a big vote of thanks to Anthony Pace, another former Director of Research, who, together with Charles Lockwood, did so much to get the project off the ground in the first place. Not only did Tony get JTAP going in the first place, he provided much of the energy in the first couple of years to keep the ball rolling.

Obviously there has not been room to mention everybody involved. To those I have missed your help and support has been valued. If the UFO Times gets anything like the support JTAP and the BUFORA Bulletin have over the years, it is assured of success.

In the ten years since JTAP was first published much has happened both to BUFORA and in the UFOlogical world as a whole. During that time BUFORA has become recognised as one of the world leaders in the field of UFOlogy. It is a foundation we can look forward to building upon.

JTAP has certainly lived through an interesting ten years in UK and World UFOlogy - Hears to the next ten years and beyond with BUFORA and UFO Times !!

REFERENCES

1. Gamble, S.J. (1988) Editorial. JTAP 5 p 65.

AN ANALYSIS OF NORTHAMPTONSHIRE UFO REPORTS 1950-1988.

Ernest Still

46, Occupation Road, Corby, Northamptonshire, NN17 2EF.

ABSTRACT

This paper examines UFO reports from the county of Northamptonshire covering the years 1950 to 1988 inclusive. A number of different parameters were studied to see if an patterns could be determined. This study is compared to other similar statistical studies

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BIOGRAPHY

Ernest has been interested in the study of UFOs for many years. For several years he has been a BUFORA Accredited Investigator covering Northamptonshire. In addition Ernest was a founding member, and is currently Secretary of the Northamptonshire UFO Research Centre (NUFORC).

INTRODUCTION

This study covers the period 1950 to 1988, a total of 38 years. I have collected sightings from newspaper articles (clippings), members of the public and (Northamptonshire cases) from the BUFORA files. A total of 87 cases were obtained, mainly from the NUFORC files, but also some from the BUFORA files.

I analysed them according to area distribution in Northamptonshire. This was to see if there was some kind of pattern, and the possibility of, perhaps, detecting a future sighting. Also an analysis of the sightings was made by arranging them on a day, time, year basis to see if there was any kind of pattern. I understand that this really is an insufficient number of cases to make a proper study of the Northamptonshire area, but it does show a pattern for a specific month of the year and a pattern for time.

RESULTS

1. LOCATION

The main sighting areas are shown in Table One below. A basic pattern in these UFO reports was that they tend to haunt specific locations more than others.

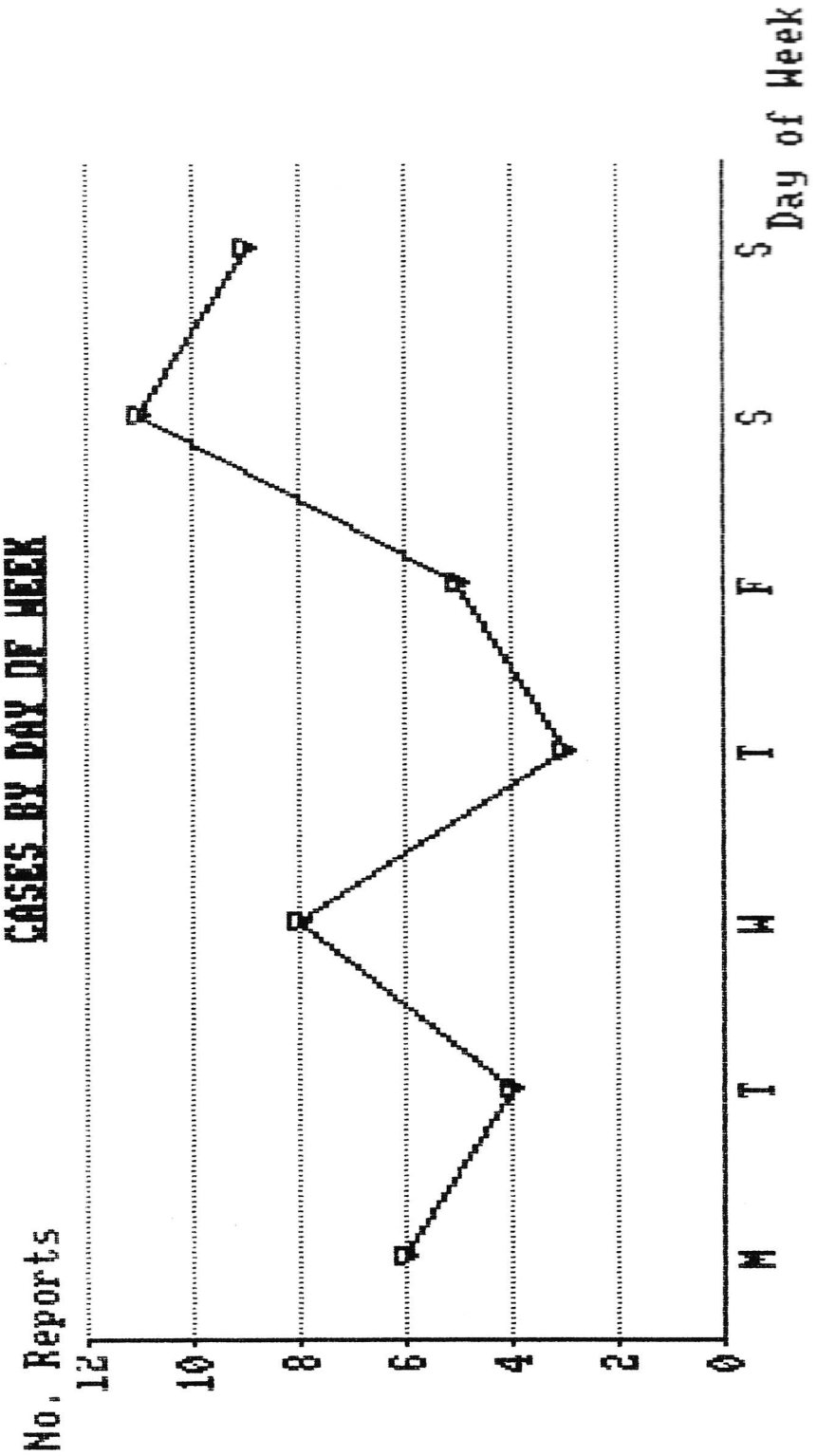
2. SEX OF WITNESSES

I also made a study of the sex of the witnesses. There were 64 female witnesses plus one female child. Male witnesses were 59 plus two male children.

3. DAY OF THE WEEK

The first significant pattern which became apparent was that sightings tended to collect around specific days of the

Northamptonshire Cases cont ..



Northamptonshire Cases cont ..

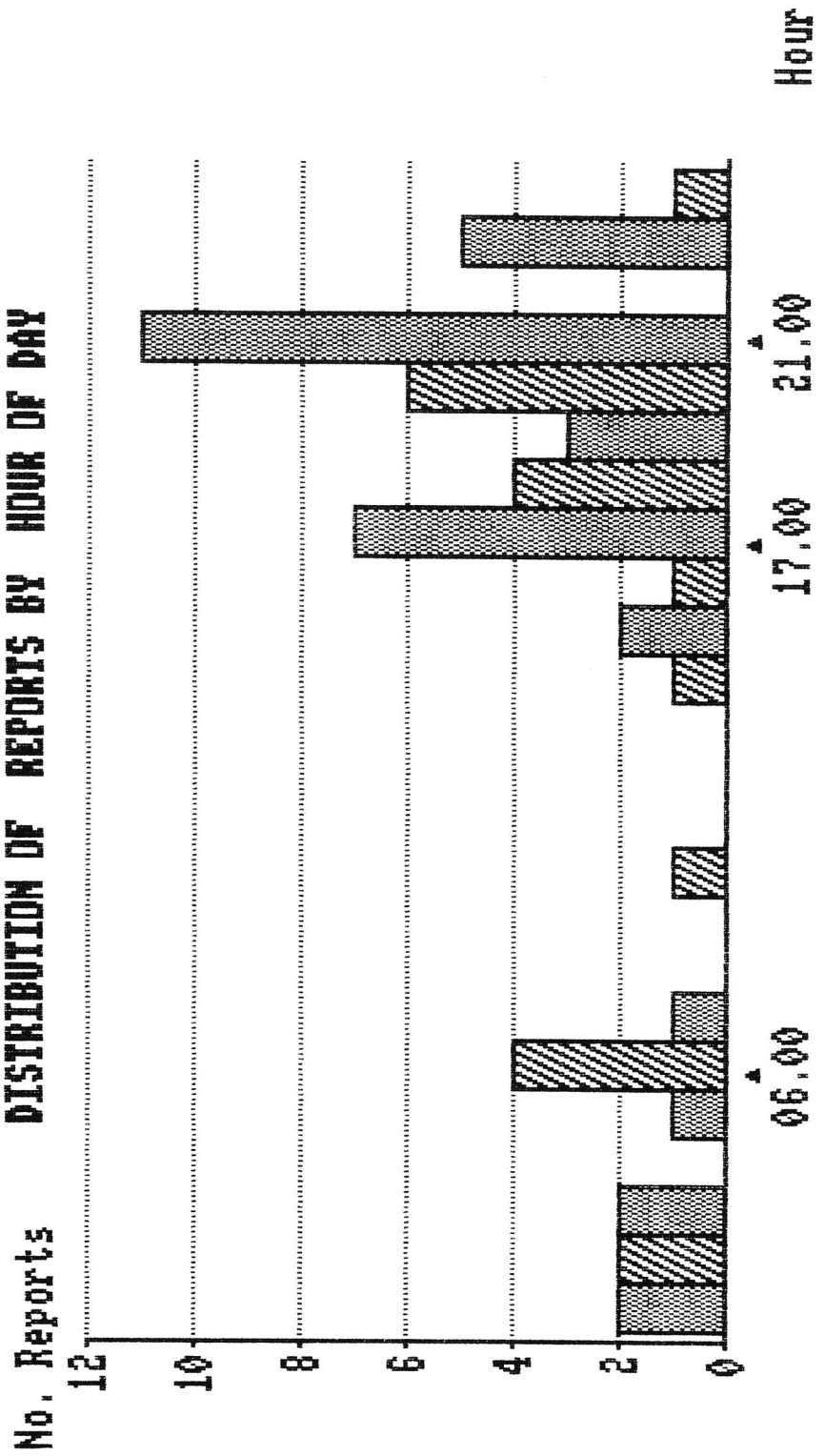


TABLE ONE

BREAKDOWN OF REPORTS BY AREA

Area	Cases	Percent
Corby	15	25.0
Kettering	13	21.7
Northampton	8	13.3
Wellingborough	6	10.0
Daventry	5	8.3
Higham Ferrers	4	6.7
Rushden	4	6.7
Desborough	3	5.0
Preston Capes	2	3.3
Total	60	100.0

TABLE TWO

BREAKDOWN OF CASES BY DAY OF WEEK

Day	Cases	Percent
Saturday	11	23.9
Sunday	9	19.6
Wednesday	8	17.4
Monday	6	13.0
Friday	5	10.9
Tuesday	4	8.7
Thursday	3	6.5
Total	46	100.0

week. This is shown in Table Two above, and in Figure One.

As can be seen Saturday gave the highest number of reports, with a low number of reports on Thursday.

This result is similar to two previous UK studies. Wootten (1) studied all BUFORA cases for the years 1980 to 1982 and found that the total number of reports was greatest on Saturday and Sunday. Randles (2) found a similar result for northern England reports from 1975. In addition Wootten found a mid-week peak on Thursdays, and Randles one on Tuesdays. This is different from the results presented here. John Keel (3) had previously shown a mid-week peak on Wednesday.

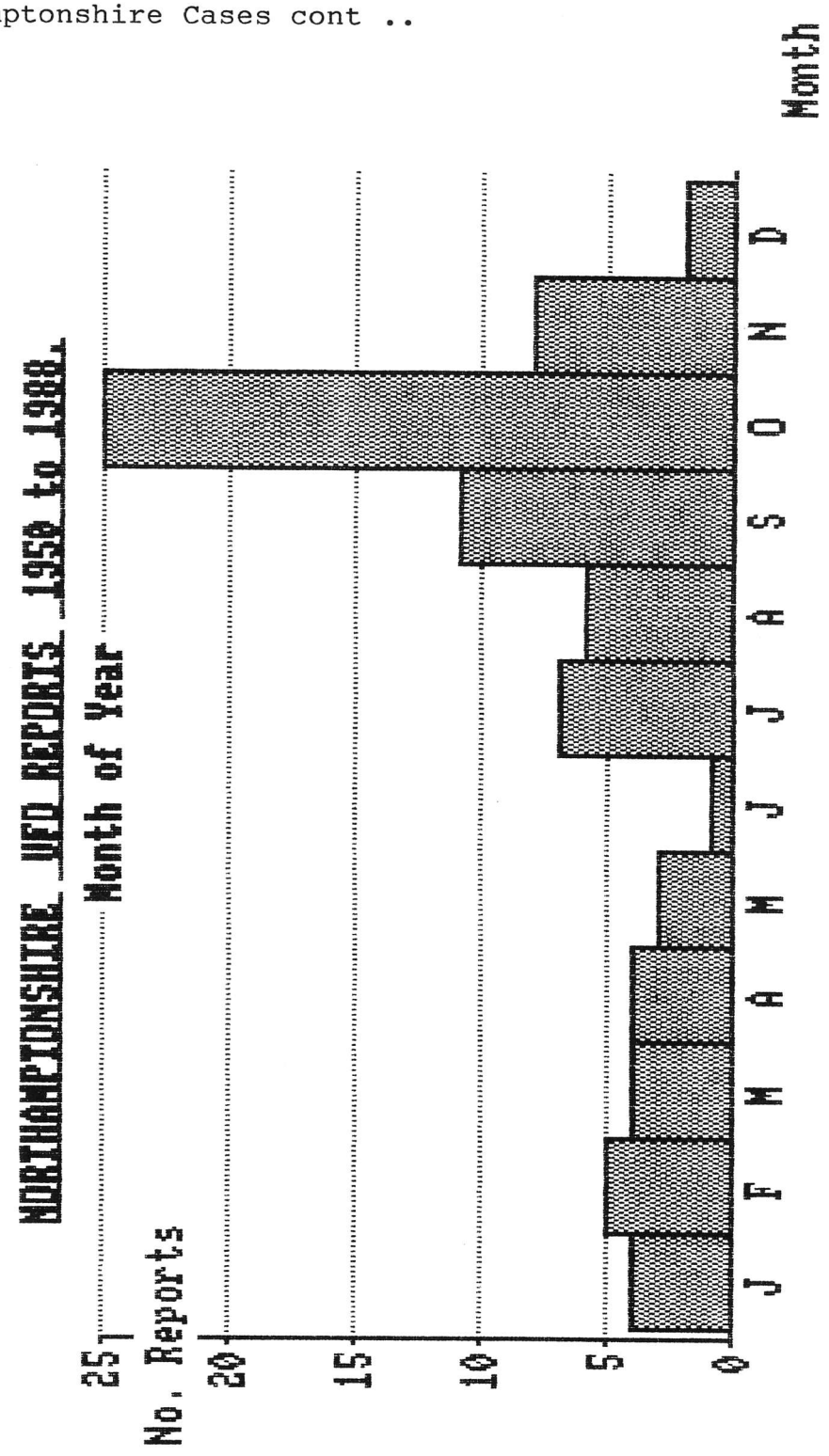
4. TIME OF DAY

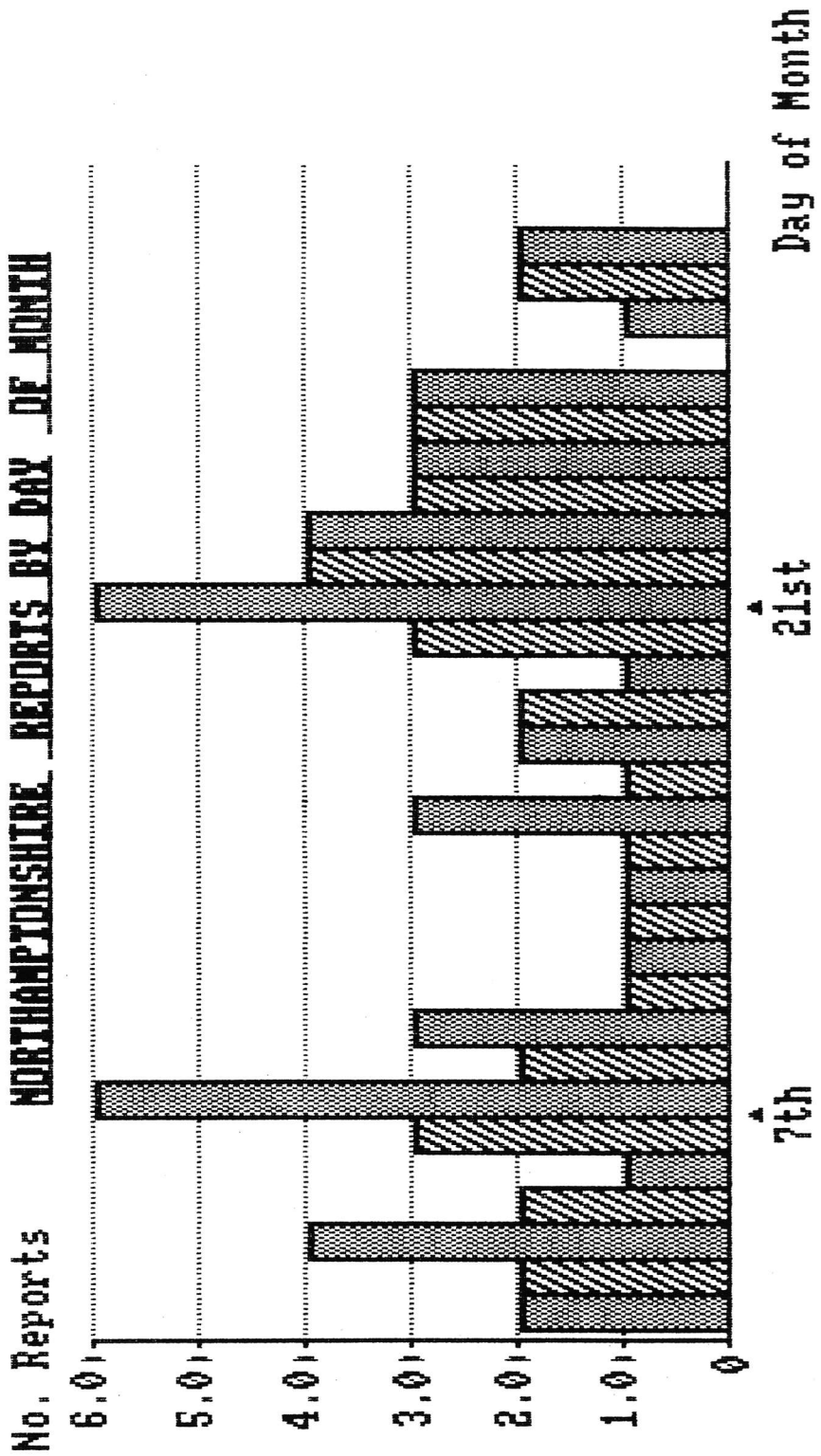
The second pattern was that sightings tended to collect around specific times of the day (see Figure Two).

Most UFO sightings seem to be reported between 1700 hrs and 2300 hrs. This is similar to the result found by Wootten.

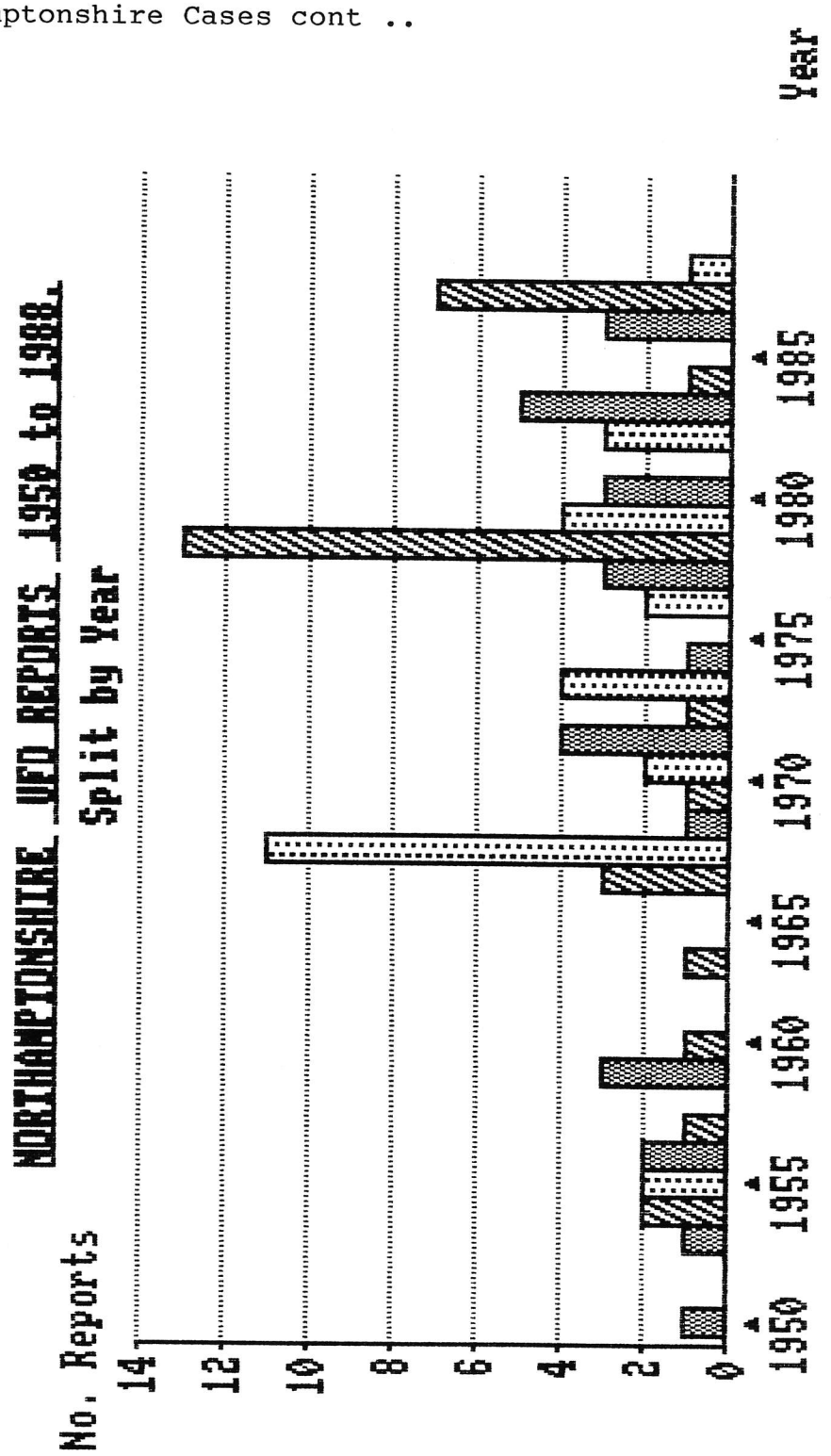
In these reports, there is a peak period around 2100 hrs. There appears to be a small peak around 0600 hrs.

Northamptonshire Cases cont ..




NORTHAMPTONSHIRE REPORTS BY DAY OF MONTH
No. Reports
6.0
5.0
4.0
3.0
2.0
1.0
0
7th
21st
Day of Month

Northamptonshire Cases cont ..



The number of cases for each hour of the evening peak are shown in Table Three.

TABLE THREE

Peak Reporting Hours

Hour	Reports
2100	11
1700	7
2000	6
2300	5
1800	4

5. MONTH OF THE YEAR

The third pattern discovered concerned the month of the year of the report (see Figure Three). There is a peak period around October (15 reports) with September (11 reports) and November (8 reports). Most UFO sightings seem to be reported during this period

Wootten reported peak activity covering the months August, September and October. This was similar to figures given by Randles (2) for northern England covering the years 1972 to 1975.

A breakdown (Figure Four) is also given by day of the month, there appears to be nothing significant in this.

6. REPORTS BY YEAR

There does seem to have been a peak number of UFO sightings in 1967 and again in 1978 in the Northamptonshire area (see Figure Five).

I may be wrong, but I believe there is a strong possibility of there being another peak period here in Northamptonshire towards the end of this year, around October time.

CONCLUSIONS

The largest percentage of sightings were reported on a Saturday night at around 9 p.m. Sunday evening being second and Wednesday evening third, between the hours of 1700 to 2300. The main month for reports being October, with September and November being the other two most prominent months. Because of the small number of reports, big changes are recorded, I am collecting further reports.

The main years, or flaps as they are known, when there appears to be an increase in sightings, were in 1967 and 1978 and as I have said, I predict a possible flap later this year in October 1989. I will have to wait and see.

AKNOWLEDGEMENT

Steve Gamble extracted information on the Northamptonshire cases from the BUFORA and his own files.

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1. Wootten, M.R. (1985) A Statistical Overview 1980-1982. JTAP 4, pp 20-27.

2. Randles, J. (1977) Statistical Analysis of Northern UFO Activity in 1975. BUFORA Journal 5, No 5, pp 7-8.

3. Hendry, A. (1980) The UFO Handbook, page 252, Sphere Books, London.

SOBEPS CONGRESS - A REPORT

S.J.Gamble

ABSTRACT

The First European Congress on Anomalous Aerial Phenomena was held in Brussels, Belgium between the 11th and 13th November 1988. The organisers were SOBEPS (Societe Belge d'Etude des Phenomenes Spatiaux), the Congress was held at their headquarters. This report provides a brief summary of the Congress.

There were in excess of fifty delegates from Austria, Belgium, France, Italy, Netherlands, Spain, Switzerland, UK, USA and USSR.

Although French is the main language in Belgium all sessions were presented in English. There were a number of UK delegates including Hilary Evans, John Spencer, Bob Digby, Ken and Anne Phillips and myself.

A wide range of topics were covered, there was something of interest for everyone. Subjects included in depth analysis of individual cases, methodology and computerised handling of data. A nice book of Proceedings was produced containing most of the papers.

The first session on the Friday afternoon was chaired by Jacques Scornaux of SOBEPS. It started with a long but interesting paper by Auguste Meessen on the Analysis of Physical Aspects of the UFO problem. This was followed by a presentation by Maurizio Verga. Maurizio's paper "Computer technology : a new breakthrough in UFO research - The Italian example" was the first of several contributions on the use of computers in UFO research. After dinner on Friday evening was reserved for Professor Meessen to demonstrate some of the principles of physics which he had spoken of earlier in the day.

The Saturday morning session was chaired by John Spencer (BUFORA Council member and ICUR Treasurer). The session started with a joint paper by Edoardo Russo and Gian Paolo Grassino of the Italian group CISU. This was called "Towards a European UFOlogy - Where is America going to?". Unfortunately the next contributor Jean-Pierre Petit was not able to be present in person but had written to the meeting. Auguste Meessen was able to take questions on Jean-Pierre's published paper. This was followed by Claude Mauge with a paper about "A preliminary list of 'classical' UFO/IFO sightings". The morning session concluded with ICUR Chairman Robert Digby who made a short presentation about the aims of ICUR.

Proceedings on Saturday afternoon were chaired by Ken Phillips (BUFORA). This session started with a paper by Michel Figuet on "Criteria for Selecting the Hardest Cases and other Recent Works on French and Belgian Sighting Catalogues". Michel urged that UFOlogists apply strict criteria to cases included intheir files, and to purge their files of cases which did

not meet these criteria. This was followed by a paper by Paolo Toselli of Italy about "The Abduction Mysticism".

Next, Denys Breysse spoke about his Becassine Project. Becassine is a computerised database of Close Encounter of the Third and Fourth Kind reports. Amongst other things the database had been used for statistical studies and up to October 1988 contained about 2000 reports. Denys pointed out that the Project was designed to study UFO reports, not the UFO phenomenon.

The Saturday afternoon continued with Jacques Vallee speaking about his current researches. The session was concluded with Vladimir Rubstov of the USSR whos paper was entitled " The problem of anomalous aerial phenomena and its methodological lessons".

After dinner on Saturday evening was reserved ICUR Vice Chairman and International Director of MUFON, Walter H. Andrus. Walt's paper concerned "The Gulf Breeze, Florida Case". This is a very involved sequence of reports involving a large number of photographs, a single repeater witness and a large number of independent reports. In addition to Walt, a number of other leading US UFOlogists have been involved in the investigations including Bruce Macabee and Budd Hopkins. The story has been dealt with in some detail in the MUFON Journal, and hopefully Walt will be able to bring everybody up to date at the London Congress in July.
Sunday morning saw Jacques Scornaux back in the chair. The session started with Hilary Evans thought provoking paper on "The Myth of Extraterrestrial Visitations". To summarise this paper I can not better Hilary's own summary "Informed sources in the United States declare that the 'new UFOlogy', espoused by those European researchers who favour a psychosocial interpretation for the UFO phenomenon, is moribund. This paper considers the possibility that this death announcement may be premature, and that what transatlantic UFOlogists are offering as a replacement is less than satisfactory." Hilary was followed by Richard Haines who spoke about the "Analysis of a UFO Photograph". This was a very detailed study which he had carried out into a single UFO photograph which had been taken on Vancouver Island, British Columbia in October 1981. The Sunday morning session ended with a very interesting presentation by Pierre Lagrange concerning Kenneth Arnolds report.

The Sunday afternoon was given over to general discussion and a review of press coverage of the event. The Congress was featured in an extensive item on the national TV news on Saturday evening.

The Congress also provided an opportunity for one of the rare meetings of the full ICUR Executive. Many useful discussions were held throughout the Congress. I think everybody who attended was very impressed by how well organised it was. Equally impressive was the SOBEPS Headquarters with library, printing facilities and lecture rooms.

I.C.U.R. CONGRESS '89.

FIFTH LONDON INTERNATIONAL UFO CONGRESS.

14th to 16th JULY 1989.

Following the preliminary information in the March and September 1988 issues of JTAP we can now provide further details about the Fifth London International UFO Congress which will be held at the London Business School, Regent's Park, London NW1, United Kingdom on Friday 14th to Sunday 16th of July 1989. This major event will provide an opportunity to meet leading UFOlogists from many different countries. The Congress will follow a similar format to the very successful 1987 Congress also held at the same venue.

The Congress will be opened on the Friday morning by the BUFORA President, Major Sir Patrick Wall, MC VRD RM (Retd).

On the Friday evening a Congress dinner will be held at the London Business School, whilst the Saturday evening will be reserved for a film show. It is hoped to include the film "The UFO Experience" in the film show.

One major departure from the previous format will be a special study group which will be looking at all aspects of Abductions. It is intended that the study group will consist of six leading UFOlogists with varing outlooks and experience. Each member of the group will make a short presentation of their views to the Congress. This will be followed by a short open discussion which will allow delegates to add their own views. The members of the group will then go away in closed session for further discussions, reporting back later in the Congress. It is hoped that firm proposals will come out of this meeting on how to deal with and what our attitudes should be towards Abduction cases.

The full meeting of I.C.U.R. will be held to coincide with the Congress. A report from the I.C.U.R. meeting will be made to the Congress.

It is too early to announce a full list of speakers or the complete programme. The preliminary list of speakers includes Walter Andrus (International Director of MUFON), Bertil Kuhlemann (Past Chairman of ICUR), Paul Fuller (BUFORA) (talking about Circles Phenomena) and Cynthia Hind (MUFON Director for Africa).

The Congress is being organised by the International Committee for UFO Research (ICUR) with assistance from it's member organisations BUFORA and MUFON. Due to the limited accomadation, and the need to keep costs down Press passes are not being issued.

It will be possible to book for each individual day of the Congress (at £12 per day) or to book for the whole three days at a discount rate (£30 for three days). This will include

admission to the lectures and refreshments, lunch is excluded. There will be a seperate charge for the Congress Dinner (£14)and the film show (£1)

If you would like further details (please enclose stamped addressed envolope) write, or to book your place (return form) to :

I.C.U.R. Congress '89,
P.O. Box 314,
Penn,
High Wycombe,
Buckinghamshire,
HP 10 8 PB,
UNITED KINGDOM.

(PLEASE NOTE: This event is organised by ICUR and is entirely independent from the London Business School. All enquiries should be sent directly to ICUR at the address above. The information in this announcement may be subject to alteration)

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D.	All Days Attendence Special Offer	( )	£ 30.00
E.	Congress Dinner, Friday Night	( )	£ 14.00
F.	Film Evening, Saturday Night	( )	£ 1.00
	Total enclosed		£

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THE MYSTERY CIRCLES - STATUS REPORT - PART 3.

Paul Fuller

The first two parts of this article appeared in the March and September 1988 editions of JTAP.

ABSTRACT

This section, which is the concluding part, discusses the results of a survey carried out amongst farmers in the areas likely to be effected by the circles. The survey was jointly funded by TORRO and the BUFORA Research Department.

The final paragraphs summarise evidence both for and against the Vortex Theory of Circle Formation.

5. The BUFORA/TORRO Survey

5.1. Reasons for Carrying Out the Survey

During late 1986 BUFORA's Research and Investigations Departments were becoming increasingly concerned with the problem of hoaxing and the lack of accurate, meaningful data available to us to allow a proper evaluation of the phenomenon. We were particularly concerned with the following issues:-

(a) whether or not the apparent evolving of formation types during the previous five to six years represented a true characteristic of the phenomenon, or whether this merely reflected reporting bias by the media to concentrate on the more exciting formation types (eg the quintuplets) at the expense of the less exciting formations (eg the singles);

(b) we wanted to know how many formations were appearing each year, how many types of formation were appearing, and what proportion of formations were being reported by the media;

(c) we were particularly interested in the beliefs of the landowners who were most familiar with the phenomenon and whether or not any farmers had directly observed the mechanism responsible for creating the circles. If anyone knew what was responsible for the phenomenon or had witnessed an actual circle formation, surely the landowners would know?

We noted with concern that every summer new types of formation were being reported by the British media, beginning with the first accounts of triplets in 1981, the first accounts of quintuplets in 1985 and then ringed circles making their first appearance during 1986. We were very concerned that the appearance of these more complex circle patterns suspiciously

coincided with the emergence of the phenomenon as a subject worthy of national and international publicity. Could this mean that the long-established single circles were caused by a 'natural' (possibly meteorological) phenomenon, whilst the more complex geometrical patterns merely represented media hoaxes ?

Two factors supported this conclusion. Firstly, we knew of no accounts of the more complex geometrical formations being discovered prior to 1981, the year in which media interest in the phenomenon first took off. And secondly, we noted that two known or suspected hoaxed circles (Westbury 1983 and Alfriston 1985) were both examples of very complex geometrical patterns (quintuplets). This suggested that unless accounts of pre 1981 triplets and quintuplets could be discovered, the more complex formations were really media hoaxes whilst the single circles were more likely to be 'natural' or meteorological in origin.

To test for the lack of pre 1981 complex formations BUFORA carried out a literature search through 100+ editions of the nearest local newspaper to Cheesefoot Head (the Winchester based 'Hampshire Chronicle') for every weekly issue between May and September for the years 1975-79 and for 1873 (which just happened to be on the reader). Not one of these issues carried a single item of news about the "mystery circles", even though circles had definitely appeared in or around the Cheesefoot Head 'punchbowl' only 4 miles from the newspaper's head office throughout this period ! The implication behind this discovery was that we needed to extend our search for pre 1981 complex formations to the landowners themselves. It was for this reason that the British UFO Research Association and the Tornado and Storm Research Organisation carried out the first quantitative survey of the phenomenon during 1987.

5.2. Methodology

The objectives of the BUFORA/TORRO Survey were

1. to provide verifiable accounts of triplet, quintuplet and ringed circles prior to 1981, the year in which the phenomenon first achieved nationwide publicity in the UK;

2. to provide an accurate estimate and confidence interval for the average number of cereal acres per circle formation per year;

3. to provide an estimate of the proportion of cereal farmers who had reported a circle formation to an investigative agency (eg the police, or the media); and

4. to assess the beliefs of the sampled farmers as to their perceived cause of the phenomenon.

Three of these objectives (numbers 2-4) were best met by carrying out a random sample of cereal farms within a conveniently referenced area known to have produced circle

formations, whilst the first survey objective was best met by carrying out a complimentary Sub Survey at other locations known to have produced cropfield circles.

The Main (random) Survey was carried out in the English County of Hampshire, where many formations had been reported during the previous decade or so; whilst the (quota) Sub Survey was carried out in parts of the English Counties of Hampshire, Oxfordshire, Wiltshire, Berkshire and Sussex in Southern England.

A survey questionnaire was designed along with a letter of introduction from the Tornado and Storm Research Organisation and funding was provided by both TORRO and BUFORA during December 1986 to carry out the survey. Because circles were believed to only appear in cereal crops a complex method of only selecting cereal farms for the Main Survey was carried out using the 1984 Agricultural Census returns for Hampshire such that questionnaires were only sent to farms which were located in parishes where a high proportion of the agricultural area was known to be cultivated in cereal crops. 381 questionnaires were posted during January and February 1987 and 134 were returned (35%). Of these responses 44 (33%) were returned by non cereal farmers, thus reducing the number of valid questionnaires to 90. These represented 60 Main Survey Respondents and 30 Sub Survey Respondents.

5.3. Survey Results

5.3.1. Frequency of Occurrence

The 60 Main Survey respondents reported only four circle formations over a reporting period of 6 years. This suggested that about 1% of Hampshire's cereal farms experience circle formations during any one year. However, because the surveyed farms were, on average, five times larger than the average cereal farm size in England and Wales (273 Ha compared with 50 Ha), this estimate was discarded in preference to more meaningful estimates based on the average number of (cereal) hectares per circle formation per year. This produced estimates of one circle formation every 24,600 Hectares per year (or one formation for every 246 square kilometres per year!).

To interpret this estimate, two different situations were possible:-

1. If crop circles are created by a mechanism which is dependent on the presence of cereal crop, then this former estimate is applicable.

2. If, alternatively, crop circles are created by a mechanism which can appear anywhere, and the presence of cereal crop is independent of the causing mechanism, then an estimate based upon the entire sampled agricultural area (rather than the sampled cereal area) must be used.

This latter estimate works out at one causal mechanism every 34,850 Hectares per year, or one mechanism every 348 square kilometres per year, and would be applicable if a meteorological explanation was proven to account for the phenomenon. If the Agricultural Estimate is used, the number of circle formations in England and Wales is approximately 100 per year whilst the number of Causal Mechanisms is approximately 410 per year. These projections have the following 90% confidence intervals:-

No of Formations per Year in England and Wales : 15.2 to 179.2

No of Mechanisms per Year in England and Wales : 63.2 to 745.2

These relatively large confidence intervals are due to the very small sample size of the survey (90) and they depend upon many technical assumptions concerning the method of sampling, the accuracy of the sampling period (6 years) and the sampling distributions of the numbers of mechanisms and formations, amongst others.

5.3.2 The Farmer's Beliefs

Survey respondents were asked to Agree or Disagree with three proposed explanations for the cornfield circles -

a) Hoaxing,

b) The Weather, and

c) U.F.O.s.

Only 31% of the respondents made a positive judgement (ticking Agree or Disagree) about their beliefs, and a higher proportion of the Sub Survey Respondents (40%) expressed a positive opinion about likely causes of the phenomenon than the Main Survey Respondents (26%). Significantly, the survey respondents were least willing to pass a judgement about U.F.O.s (20%) and most willing to express an opinion about The Weather (31%) and Hoaxers (41%).

Overall, statistically significantly higher proportions of the farmers agreed with Hoaxing and The Weather compared with U.F.O.s (Chi-Squared with 6 df = 30.56, p=0.01), whilst there was no significant difference between the proportion agreeing with the Weather and the proportion agreeing with Hoaxing (Chi-Squared with 3 df = 4.17, p=0.10). These findings (table 2) were consistent when the "Don't Knows" and Non Respondents were both included and excluded, thus in general cereal farmers in Hampshire were more likely to support Hoaxing and The Weather than they were to support U.F.O.s. as likely explanations for the circles.

If we examine the responses of the 11 farmers who reported circle formations appearing on their land, 6 agreed with Hoaxing whilst none disagreed (5 didn't respond); 3 agreed with The Weather whilst 3 disagreed (5 didn't respond); whilst only 1 respondent agreed with U.F.O.s and 1 disagreed (ie 9 failed to respond). With such a low response rate it is difficult to draw valid conclusions from

TABLE TWO

Numbers and Proportions of All Survey Respondents to Question 7:

	Hoaxers	The Weather	U.F.O.s
Agreeing	29	19	3
Disagreeing	8	9	15
"Don't Know"	18	15	16
No Response	35	47	56
	Proportions INCLUDING Non Respondents		
Agreeing	32	21	3
Disagreeing	9	10	17
No Judgement Made	59	69	80
	Proportions EXCLUDING Non Respondents		
Agreeing	78	68	17
Disagreeing	22	32	83

this sub sample; however, it seems clear that Hoaxing gains greatest credibility amongst those farmers actually experiencing the phenomenon on their land.

Only 17 alternative explanations were offered to those suggested on the Questionnaire, namely Helicopters (7), Disease or Bird Damage (3), Soil Fertility or Ancient Settlements (2), the Army or Ministry of Defence (2), Quasi-Religous Hoaxers (1), Gravitational Forces (1) and Foxes (1). The confusion between helicopter-caused damage and the cornfield circles was dealt with in para 2.3.

These findings suggest that no consensus of opinion exists amongst the landowners as to the likely cause of the phenomenon, a situation which could be explained by there being multiple causes for the circles. The fact that such a low proportion responded to this question suggests that the phenomenon is of little interest amongst the landowners concerned, whilst the suggestion that U.F.O.s are creating the phenomenon seems to gain little, if any, credulence.

5.3.3. Reporting

Only two of the eleven Main and Sub Survey Respondents who had actually discovered circle formations on their land had ever reported their discoveries to investigative agencies. These two respondents represented only one fifth of the respondents and only one tenth of the formations. This finding suggests that a great many

circle formations are appearing but going unreported, and this is supported by the Main Survey estimate that approximately one hundred formations a year are appearing in England and Wales (although less than a dozen seem to receive publicity).

5.3.4. Formation Types Reported

Figure 3 tabulates the 19 formations reported by the eleven survey respondents reporting formations, whilst Figure 4 tabulates those formations which were unknown prior to the survey. Altogether 13 (68%) of the reported formations were unknown prior to the survey whilst two of the formation types (the triangular triplet and the regular quadruplet) were unknown prior to the survey.

These findings suggest that increased searching will continue to produce more and more formation types, and that our knowledge of the phenomenon continues to be incomplete.

5.3.5. The Apparent Evolving of Formation Types

The survey failed to uncover reports of pre 1981 complex formations (triplets, quintuplets and ringed circles); however, this failure has been superseded by the discovery of several pre 1981 complex formations (including a quintuplet at Headbourne Worthy in 1978), and by the discovery of the two new formation types in the Survey, which could both be interpreted as complex formations which for various reasons failed to attract media attention.

It seems almost certain that media bias to only report the most sensational, accessible formations resulted in the apparent evolving of formation types and as a result we are satisfied that the evolving of formations does not represent a true characteristic of the phenomenon.

5.4. Survey Conclusions

The survey failed to produce any evidence whatsoever that U.F.O.s were creating the circles, but evidence was produced which supported our contention that either Hoaxing and/or a rare meteorological phenomenon may be responsible for the cornfield circles. ie

1. cropfield circles occur with greater frequency than was previously thought;

2. only a small proportion of formations are receiving publicity;

3. farmers tend to support relatively mundane explanations for the phenomenon;

4. only 3 of the 90 respondents believed that UFOs were creating circles, five times as many respondents disagreed with UFOs as a likely explanation;

5. not one of those farmers actually experiencing circles ruled out Hoaxing as a likely explanation for the phenomenon; and

6. no accounts of UFOs creating circles were produced by the survey.

The evidence suggests that two different explanations could account for the phenomenon: Hoaxing and Vortices. This would account for the lack of a consensus amongst the sampled farmers and it would also account for the contradiction of why there are proven hoaxes (para 3.2) and why there are at least four alleged eye witness accounts of vortices creating circles. It is, however, unclear what proportion of circles could be hoaxes and what proportion could be meteorological in origin.

6. RESEARCH CONCLUSIONS

6.1 Differences between Hoaxed Circles and Vortex-Produced Circles

Evidence suggests that two independent phenomena are resulting in the discovery of cropfield circles, those being created by a previously unrecognised descending atmospheric vortex, and those being created for publicity purposes by hoaxers. The evidence suggests that hoaxed circles differ from those of meteorological origin in the following respects:-

a. the crop is damaged and/or crushed;

b. their shape may be very irregular and/or non smooth (eg in the outer ring);

c. their shape may be perfectly circular (eg by using a pole and chain);

d. the spiral centre may be precisely positioned at the centre of the circle;

e. a central (filled in) hole may be present at the centre of the circle;

f. the swirl pattern may not be present or well defined across the entire circle;

g. the outer rings may not contra-rotate with the parent circle;

h. there is a total lack of layering and banding in the affected zone;

i. the hoaxed circle is normally discovered and produced during daylight rather than at night;

j. track marks and damage in adjacent crop should be apparent across the entire site;

k. no very thin sheath effects are present;

l. there may be a clear zone at the edge of the circle where no crop is present;

m. the circle may receive widespread publicity.

6.2 Strengths of the Vortex Theory

Dr Meaden's developing Vortex Theory successfully accounts for many of the distinctive characteristics of the genuine phenomenon because he has successfully matched (often unusual) characteristics of vortices with (well documented) characteristics of cropfield circles. His theory

is particularly successful in accounting for

a. the lack of damage to the crop itself,

b. the existence and positioning of the outer rings and sheath effects;

c. the existence of contra-rotation in the outer rings;

d. the existence of the well-defined spiral pattern;

e. the existence of layering and banding within the affected crop;

f. the equal distribution of spin directions;

g. the clustering of circles around steeply inclined hillslopes;

h. the lack of damage and/or footprints within the affected zone or in adjacent crop;

i. the long-established, international distribution of phenomena of a similar nature; and

j. the existence of eye witness accounts of vortices creating circles.

His theory may even account for some of the UFO reports being associated with the cornfield circles due to the occasional existence of unusual luminous phenomena during some vortex events (see ref 8 in previous article).

It seems very difficult indeed to dismiss the eye witness accounts described in paragraphs 4.3.12. of this article, the existence of a more exotic "eye witness account" (see "Magonia" No 31 pp 11-14) suggests that false "eye witness accounts" invariably support the UFO explanation, whilst those cited in this report seem to be reliable accounts of vortex-type phenomena creating circles. These accounts, the clustering of formations about steeply inclined hillslopes, and the coincidence of the sheath effects seem to be conclusive evidence supporting the vortex theory.

The existence of so many different types of circle formation (Table 1) suggests that several similar vortex models may be more realistic than a single, very complex model of vortex behaviour; however, the rather sudden appearance of the phenomenon during the 1980s may simply be due to increased searching by researchers and/or changes in the surface area devoted to arable crops nearing maturity when descending vortices are most common. The introduction of varieties of cereal with longer growing seasons may tend to increase the possibility that transient vortices will be recorded by pliable crop structures.

6.2 Weaknesses of the Vortex Theory

The controversial aspects of Dr Meaden's theory are

a. the existence of the sharply defined cut-off point and whether the descending vortex

can remain stationary to produce this effect;

b. the existence of the two formations with linear spurs (para 2.8);

c. the existence of about 25 formations with geometrically positioned outer satellites and the complexity of the vortex model required to account for this characteristic; and

d. the lack of a well defined mythology concerning the phenomenon.

Although Dr Meaden's theory has now been published by the Royal Meteorological Society (in "Weather" Vol 44 No 1), the acceptance of his theory by other experts in vortex generation may yet be forthcoming. This, we believe, is symptomatic of how novel, new phenomena come to be proposed, tested, and accepted by established scientists. We look forward to further constructive debate on this intriguing subject.

Editorial Notes:

The complete results of the survey have been written up as a detailed forty page report by Paul under the title "A Sample Survey of the Incidence of Geometrically-Shaped Crop Damage."

Only thirty copies of this detailed technical report were produced with the view to inviting comments from interested outside bodies e.g. the Meteorological Office.

Unfortunately no copies of the survey report are available for sale. There is, however, a copy in the BUFORA Reference library.

It is hoped that Paul will be able to write up the full results of his work, including the survey work, into a report which can be made more generally available. Paul will also be presenting some of this work in a paper to be given at the fifth International UFO Congress in July.

Although the survey has concentrated on the southern counties of England the circles are found in other parts of the United Kingdom and the rest of the World. For example, mention was made in my Director of Research Annual Report (BUFORA Bulletin Number 31, January 1989 page 22) of a case of crop damage in Leicestershire in which Ernest Still, Clive Potter and Ray Shaw were involved. I believe Paul Norman of the Victoria UFO Society has been investigating similar cases from Australia.

The Vortex Theory is a very interesting possible explanation for the circles phenomenon. I would stress at this point that it has not been proved conclusively that Vortices cause the Circles, but it certainly seems to be a front runner. As Paul mentions the Theory is still developing. Only time, and a great deal more work, will show if Dr Meadens Vortex Theory holds up.

ASSESSMENT OF WITNESS DATA

S.J. Gamble, R.S. Digby and K. Phillips

ABSTRACT

In a previous paper (1) we examined how much reliability could be placed upon the report of the witness. In very high strangeness cases such as abductions there is usually only one witness. The witness testimony is usually the only evidence in such cases and we are concerned about the reliability of such evidence. This paper presents additional data and further analysis building upon our earlier work.

BIOGRAPHY

Ken Phillips is a long standing investigator, having been a member of the BUFORA Council and for several years Investigations Co-ordinator. He has worked over a number of years with Dr Alexander Keul on the problems of witness reliability. Together they have carried out extensive work which lead to the Witness Anamnesis (2).

Robert Digby has been a member of the BUFORA Research Department for a number of years. He is a past Chairman of BUFORA, has served as Treasurer to International Committee for UFO Research (ICUR), and is currently Chairman of ICUR. Calling upon his wide experience Robert is frequently called upon to lecture on various aspects of UFOlogy.

Stephen Gamble is Director of Research and Vice-Chairman of BUFORA. Amongst other UFOlogical posts he holds he is Chairman of the Northamptonshire UFO Research Centre and Secretary of ICUR. Stephen has long had an interest in Psychology and has published a number of papers on the subject.

1. INTRODUCTION

As stated in our earlier paper (1) a UFO event is made up of three components. These are :

1. The UFO - where this term as defined by ICUR is used for the stimulus giving rise to the UFO report (3)

2. The UFO Report - see (3) for definition

3. The UFO Reporter

Both Hendry (4) and Hynek (5) have made it quite clear that, at least in a vast majority of cases, we study UFO reports not UFOs. In practice we end up with the last two components to study i.e. the report and the reporter.

Gamble (6) has previously stated that the reliability of the witness needs to be calibrated. This has become particularly important with the recent revived interest in abduction cases. Several recent papers (7,8) have highlighted the differences between the more psychological approach favoured by Europeans, and the Abduction orientated approach particularly favoured in the USA. The calibration of the witness is not necessarily at

variance with the Abduction investigation.

2. METHOD

The method used in this experiment has been discussed in detail previously by Keul and Phillips (9), so only a brief outline will be given here. The data used here was obtained from several audiences at UFO orientated lectures. The audiences included several made up from members of the general public (i.e. with no special interest in UFOs) and one large audience made up of members of UFO organisations and UFO reporters.

On entry to the lecture all members of the audience were given a blank sheet of paper. At the start of the lecture a slide depicting a simple UFO event was projected for a short period of time (several seconds). The slide was turned off and the audience were asked to draw what they had seen and to estimate how long they had seen it for. For all audiences the slide was projected for a similar period. Five minutes were allowed for the drawing and time estimate, after which the papers were collected.

3. RESULTS

3.1 Description of the Groups Studied.

There were four groups made up from the general public ('Control' groups). Of these, one group was all male, two groups were all female, whilst the remaining group was of mixed gender. The total number of Control subjects is 58.

In addition to the Control groups, there was one large group made up of members of UFO organisations and UFO reporters (the 'UFOlogist' group). The UFOlogist group included one result which was an extreme outlying value. On the recommendation of Paul Fuller (10) this value was eliminated from the data.

3.2 Analysis of the Duration Estimates.

The data were analysed using the Minitab Statistical Analysis package.

The values obtained for the various control groups are shown in Table One. A comparison of the combined control groups was made with the UFOlogist group. This is shown in Table Two.

The values referred to in Tables One and Two as the Mean is the arithmetic mean. This is the total of all the reported values divided by the number of values. The Median is that value which 50% of the observations are greater than and 50% are less than. All values are expressed in seconds.

After obtaining descriptive statistics for the various groups, comparison between the groups was made using a Two Sample 't' test and One Way Analysis of Variance.

3.3 UFO Drawings

In an earlier paper (11) some of the drawings made by members of the first two control groups were reproduced. These will not be repeated here, however, a small selection of drawings

TABLE ONE

CHARACTERISTICS OF THE CONTROL GROUPS.

Group	N	MEAN	MEDIAN	STDEV	S.E.MEAN	MIN	MAX
1 (Males)	15	22.47	20.00	14.75	3.81	5.00	60.00
2 (Females)	17	13.50	10.00	5.32	1.29	5.00	25.00
3 (Females)	11	22.36	15.00	17.43	5.26	4.00	60.00
4a(Males)	5	25.60	12.00	25.50	11.4	1.00	60.00
4b(Females)	10	14.00	5.00	18.63	5.89	1.00	60.00

TABLE TWO

COMPARISON OF COMBINED CONTROL GROUPS WITH UFOLOGIST GROUP

Group	N	MEAN	MEDIAN	STDEV	S.E.MEAN	MIN	MAX
Controls	58	18.63	15.00	15.41	2.02	1.00	60.00
UFOlogist	45	9.98	10.00	5.14	0.77	2.00	30.00

made by the fourth group are presented to illustrate the range of drawings obtained.

4. DISCUSSION

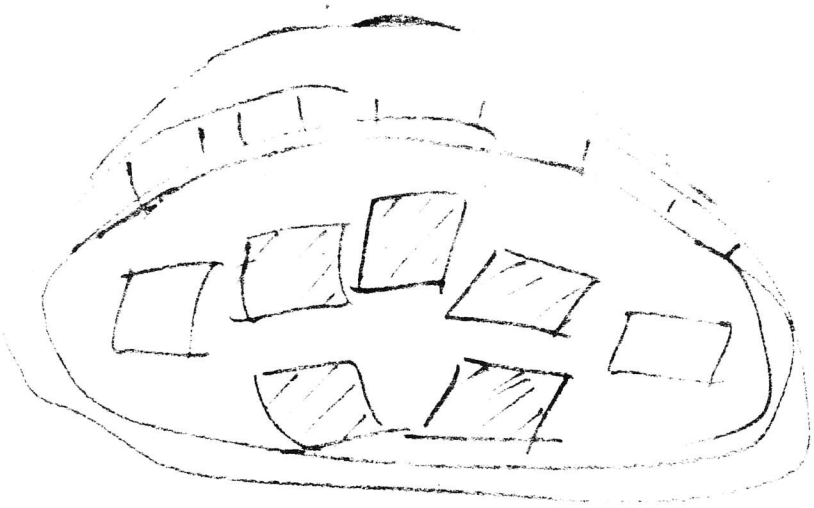
4.1 Time Estimates

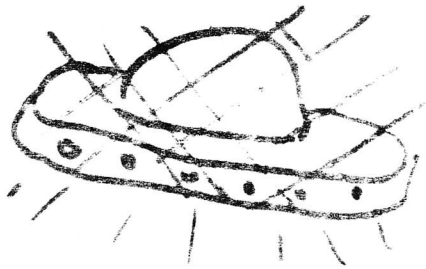
As stated above the combined results for all the control groups were compared to the values from the UFOlogists group using a Two Sample 't' test. The values obtained for this were t= 4.00, p =0.0002. This indicates that there is a highly significant difference between the UFOlogist and Control groups, there are only 2 chances in 10,000 of obtaining this difference by chance.

If we consider the values shown in Table Two, we can establish a 'Normal' range for each group. The Normal range would be defined as that range of values centred on the arithmetic mean which contains 95% of the observations. This is calculated by taking the mean +/- 1.96 times the Standard Deviation. For the control group the range would be from 0 to 48.8 seconds. For the UFOlogist group the corresponding values would be 0 to 20.0 seconds.

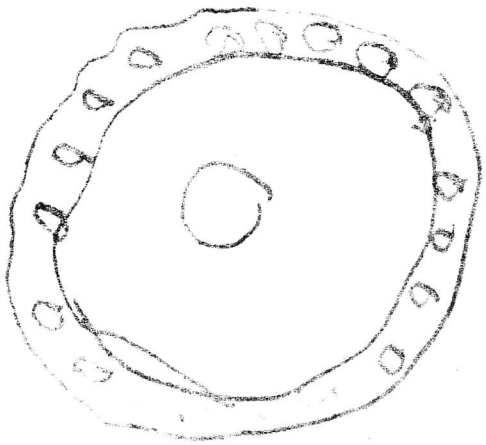
As can be seen from the results in Table One all the control groups except one contain values which would fall outside the control normal range. In the previously published (1) UFOlogist data, only one value would fall outside the expected range. The UFOlogists data is more tightly grouped

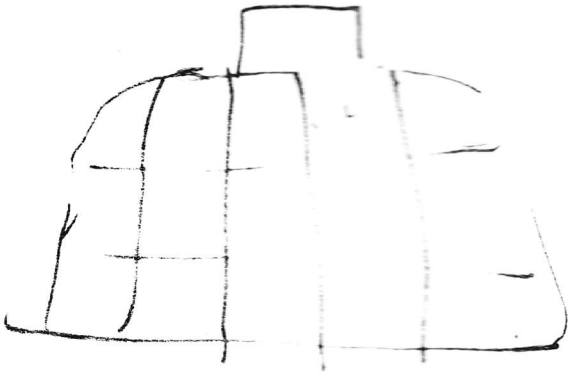
EXAMPLES OF 'UFO' DRAWINGS.

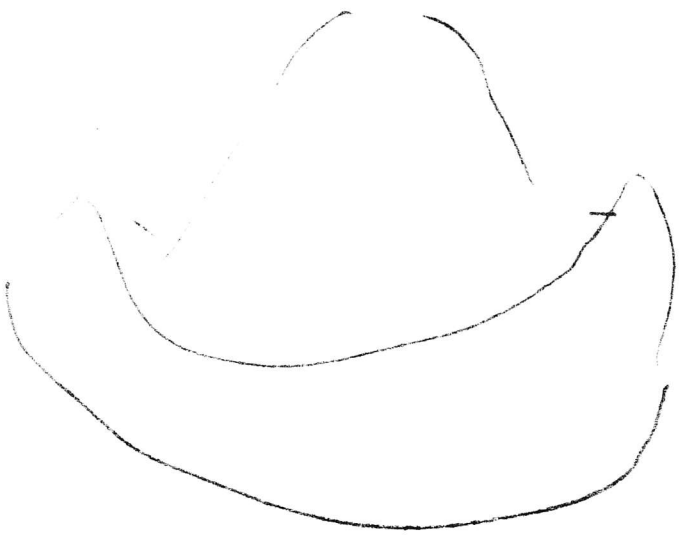




EXAMPLES OF 'UFO' DRAWINGS.







than that of the controls, this is shown by the plot in Figure One.

It can be seen from the results above that the control group is more variable than the UFOlogists group. The part of the control group with the largest variation is the results from the fourth control group. These were originally split into male (mean 25.6 seconds, SD 25.5) and female (mean 14.0 seconds, SD 18.63) components. If the two components of this group are recombined we get the new values of N=15, mean = 17.87 and SD = 20.99. This is still the largest variation and suggests that we are not just seeing an effect of small numbers when the components are split. The revised normal range for this group would be 0 to 59.0 seconds. In fact there are two values (in 15) which are 60 seconds.

4.2 Drawings

The subject of UFO drawings from this kind of experiment has been discussed more extensively by Digby (11). A small selection of drawings is presented here to illustrate the range of responses obtained. It is important to remember when viewing the drawings that the 'witnesses' were all observing the same original picture. As this picture was projected onto a two dimensional screen, position within the room can be discounted as a significant factor.

4.3 General Discussion

In all cases the subjects have been shown exactly the same slide for exactly the same period of time. The variation in the time estimates is that factor easiest to quantify. There are variations of time estimates from 1 second up to 60 seconds. This is from a group of over one hundred subjects.

There are two areas where these variations become of great concern to the authors. The first area of concern is in the case of single witness cases particularly Abduction cases, where almost always the only evidence is the testimony of a single witness without any other supporting evidence. This has long been known to be a weakness in Abduction reports. Techniques such as hypnotic regression have been used in an attempt to improve reliability, but there are significant doubts about their effectiveness (for example see Campbell (12)).

The second area of concern is the accuracy of the data going into the many computer database systems (13) increasing being used in UFOlogical studies. In the data processing industry there is the famous phrase Garbage In, Garbage Out. If the raw data being entered into these databases is highly variable, how can we expect any patterns to emerge. And if patterns do emerge what reliance can we place on them?

5. CONCLUSION

One reason often cited for not knowing the causative agent of UFO events is the wide variety of UFOs reported. These results have shown the variety of reports that can be generated from a single known event. We would suggest that,

Witness Assessment cont ...

FIGURE ONE.

at least, some of the variety found in UFO reports is as a result of the perception and interpretation of the witness. UFO phenomena are less variable than first examination of raw data would show. This does not exclude there being more than one causative agent.

The effects of individual reporter variation become of increased importance in cases where there is a single witness. The study of Abduction phenomena is an area of great interest in some parts of the UFO community. These are all very high strangeness reports which should generate a great amount of data. Yet in almost all cases they are single witness cases, exactly those cases of greatest risk by individual variation.

6. ACKNOWLEDGEMENT

The authors would like to thank Dr. Alexander Keul, who together with Ken Phillips designed the original experiment.

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DATES FOR YOUR DIARY

LONDON LECTURES.

Unless otherwise stated, BUFORA meetings will be held using the facilities of the London Business School, Sussex Place, Regent's Park, London NW1. All meetings start at 18:30 hrs. Early arrival is requested to allow the meeting to start promptly.

Meetings normally end at approximately 21:30. Half way through the evening there is a short break and the evening concludes with questions and discussion. At most meetings a range of publications are available for purchase.

There is a small charge to attend these meetings. For the London lectures the fees are £1 for members and £2-50 for non-members.

Whilst it is not anticipated that meetings will have to be altered or cancelled without prior notice, BUFORA reserve the right to do so. Non-members may be admitted to any meeting subject to availability of space. BUFORA reserve the right to refuse admission.

Copies of the programme card are available on receipt of a stamped addressed envelope from :

BUFORA (Meetings)
16, Southway
Burgess Hill
West Sussex,
RH15 9ST

April 1st

Speaker : Ralph Noyes

"Aliens - A Natural History"

May 6th

Speakers: John Spencer and Bob Digby

"The Two American Conferences of 1988 and Comparison of the U.K. and U.S.A. Experience"

June 3rd

Speaker : Jenny Randles

"Abductions"

BRADFORD LECTURE

This has been jointly organised with the Independent UFO Network (IUN).

The lecture will take place at Bradford Central Library (Room 1), Princes Way, Bradford, West Yorkshire. (The Library is just a short walk from both the railway and bus stations.)

Date : 22nd April 1989

Time : 2.00 pm to 4.30 pm

Entrance Fee : £ 2.00
(£1.50 BUFORA/IUN members, must show membership card)

Programme :
Peter Hough - The Ilkley Entity Photograph.
Phillip Mantle - The Barnsley Photographs
(Speakers subject to change)

Further Information :
Phillip Mantle,
1, Woodhall Drive,
Healey Lane,
Batley,
West Yorkshire,
WF17 7SW

Phone : 0924 444049

Aims and scope of the Journal

Research and investigation into unidentified flying object (UFO) phenomena has progressed from the early days of wild speculation into an area where scientific analysis and evaluation methods can be applied to a number of specified areas.

It is realised that ufological research is subject to a great deal of speculative comment, much of which lies on the boundaries of current scientific thought. Many existing scientific institutions accept limited discussion of UFOs and related phenomena where it has some bearing on their discipline. The Journal of Transient Aerial Phenomena (Journal TAP) offers a forum for scientists and researchers to present ideas for further discussion, results of investigations and analysis of statistics and other pertinent information.

Journal TAP aims to meet a wide range of discussion by incorporating an approach with breadth of scope, clear and topical comment conducted with scientific rigour. It intends to offer a truly international forum enabling researchers throughout the world to publish results in an authoritative publication which should serve to further knowledge of the cosmos and benefit mankind in so doing.

Notes for contributors

The Editorial Board will be pleased to receive contributions from all parts of the world. Manuscripts, preferably in English, should be submitted in the first instance, to the Editor-in-chief, 40 Jones Drove, Whittlesey, Peterborough, PE7 1UE, United Kingdom.

Manuscripts should be typed double-spaced on one side of A4 size paper with wide margins and submitted in duplicate. While no maximum length of contributions is prescribed, authors are encouraged to write concisely.

The author's name should be typed on the line below the title. The affiliation (if any) and address should follow on the next line. The body of the manuscript should be preceded by an abstract of around 100 words giving the main conclusions drawn.

All mathematical symbols may be either hand-written or typewritten, but no ambiguities should arise.

Illustrations should be restricted to the minimum necessary. They should accompany the script and should be included in manuscript pages. Line drawings should include all relevant details and should be drawn in black ink on plain white drawing paper. Good photoprints are acceptable but blueprints or dyeline prints cannot be used. Drawings and diagrams should allow for a 20 per cent reduction. Lettering should be clear, open, and sufficiently large to permit the necessary reduction of size for publication. Photographs should be sent as glossy prints, preferably full or half plate size. Captions to any submitted photograph or illustration should be appended and clearly marked.

In the interests of economy and to reduce errors, tables will, where possible, be reproduced by photo-offset using the author's typed manuscript. Tables should therefore be submitted in a form suitable for direct reproduction. Page size used should be A4 and width of table should be either 10.5 cm or 22 cm. Large or long tables should be typed on continuing sheets but identifying numbers should be placed on the upper right-hand corner of each sheet of tabular material.

Reference to published literature should be quoted in the text in brackets and grouped together at the end of the paper in numerical order. A separate sheet of paper should be used. Double spacing must be used throughout. Journal TAP references should be arranged thus :

(1) Jacques Vallee: 1965. *Anatomy of a Phenomenon*, vii, Henry Regnery, Chicago.

(2) David Haisell: 1980. Working Party Report, *Journal TAP* 1/2, pp36-40

With the exception of dates which should be presented in the astronomical convention viz : 1977 August 06, no rigid rules concerning notation or abbreviation need be observed by authors, but each paper should be self-consistent as to symbols and units, which should all be properly defined. Times however should be presented in astronomical form using the 24 hour clock and Universal Time (UT) where possible. If local time is used, this should be specified viz 19h 15 GMT.

The Editorial Board shall have the right to seek advice from referees on suitability for publication and may, on their recommendation, accept, seek revision of or reject manuscripts. If considered unsuitable for Journal TAP, the Editor-in-chief reserves the right to forward manuscripts to the Editor of Bufora Journal for consideration. The Editor-in-chief's decision will be final.

Book reviews and letters for publication will also be considered.

Where permission is needed for publication of material included in an article, it is the responsibility of the author to acquire this prior to submission. All opinions expressed in articles will be those of the contributor and unless otherwise stated, will not reflect the views of Bufora, its Council or the Editor-in-chief.

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