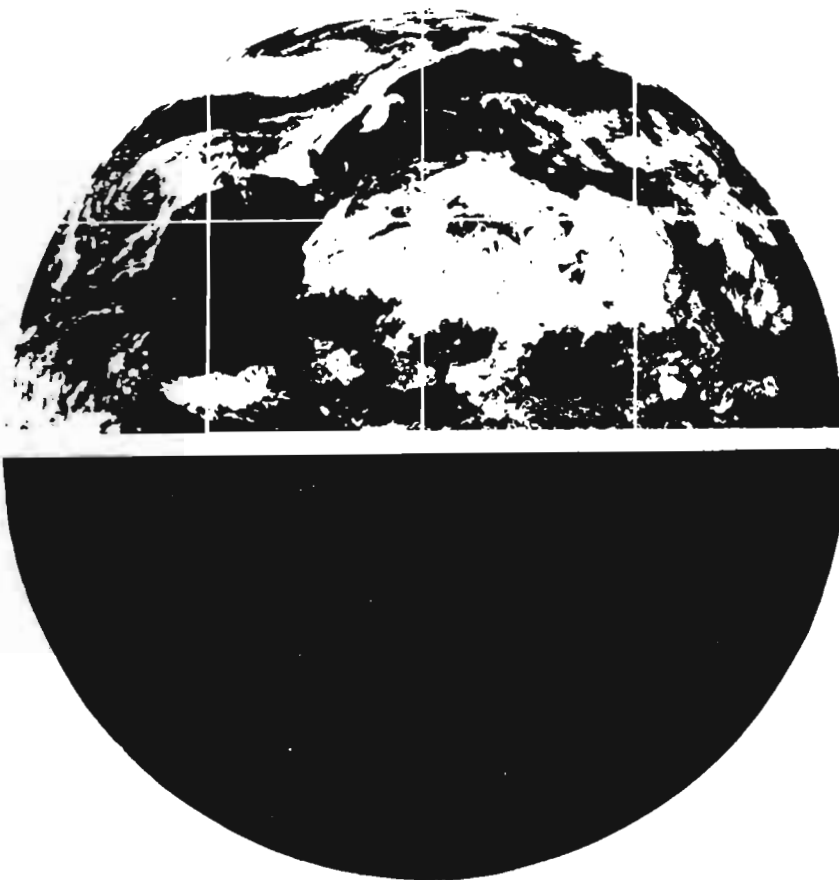


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Editorial enquiries should be addressed to the Editor-in-Chief (J-TAP), 40 Jones Drove, Whittlesey, Peterborough PE7 2HW. Enquiries concerning membership of the British Unidentified Flying Object Research Association should be sent to the Membership Secretary: Miss P.M.A. Kennedy, MBE, 30 Vermont Road, London, SE19 3SR.

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EDITORIAL

HOW DEEP SHOULD ONE DIG ?

S.J.Gamble, Director of Research.

In a previous editorial (1), I stated that one of the objectives of JTAP was to encourage the application of scientific methodology to the study of UFO phenomena. But how far can this go ? Are we in danger of turning over too many stones, and would we like what we saw under them ?

In my last editorial (1) I pointed out that we should examine all possible theories of UFO origin and we should also look at the application of all possible methods to this research.

On the subject of theories, I have previously identified (2) four different groups of theories which should be subject to research. It is my aim to give, as near as possible, equal space in JTAP to each of these theory groups. In addition to each of these groups it is also my aim to publish articles about techniques useful for investigation and research. This may mean that in the short term any one issue might have a bias towards a particular subject, but overall the contents of JTAP should balance out, for example there have been several articles in recent issues of JTAP about witness centred investigations, but there are none in this issue.

The subject of witness centred investigation brings me to my next point. A UFO case is made up of three components. These are the stimulus for a report (i.e. a 'UFO'), the case report and the witness. Since it is unusual to be left with any artifact which it could be claimed is a 'UFO' we are only left with two things to study, the report and the reporter. Recently it was suggested to

me that too much time was spent investigating the witness, that investigation was in danger of becoming too psychological. I would reply to this in two ways. Firstly by not investigating the witness you are ignoring 50% of the available evidence. Hynek (3) has stated " Why this emphasis on the character of the reporter? Given the fact that in most other areas of science, electronic and optical instruments supply us with the data for analysis, the nature of the UFO reporter is of paramount importance. In this area of scientific inquiry the UFO reporter is our only data-gathering instrument." The second point I would make on this is that since one group of theories I have identified is that UFO's may be a result of psychological or physiological events within the reporter, how can we investigate this group of theories without looking at the witness ? Indeed Hynek (3) recognised that at least some UFO's could be internally generated by the witness and he proposed for this reason we should refer to them as UFO reporters rather than UFO observers.

Further research may prove that the majority of reports are generated by either psycho- or physiological processes. (It might also prove that they are not). To ignore a particular case because the witness imagined it might be ignoring

Editorial cont

the underlying cause of the phenomenon, or to put it another way, if people only imagine UFO's why does it occur and by what mechanism. As organisations like BUFORA do not have the necessary expertise internally, we may have to seek advice from outside to further some areas of this research.

I should stress that I am not advocating that all UFO's are 'in the mind', just that this is one possible solution which should be looked at to test it's validity. In practice UFO's are complex and may be a whole range of different phenomena. We could look at one particular case, the Livingston case of 1980 (4), to illustrate just how complicated things can get.

Elsewhere in this issue (5), Stuart Campbell, the original investigator, presents a new theory to explain this case. In his original case report (4), Stuart examines a number of theories to account for the case. He examines the Extra-Terrestrial Hypothesis, but dismisses this on the grounds of lack of evidence. Again we see the scientific method at work, consider all possible theories and evaluate them in light of the evidence, even if they are not your pet theory (at this time Stuart was a strong supporter of the Ball lightning theory (6)). He also examined the possibility of the 'object' being an experimental aircraft. An alternative suggestion by Pat Hannaford that the report was generated as part of an epileptic fit was considered. This could not account for the ground markings.

Stuart concluded after considering the evidence, that the case was caused by an

observation of ball lightning, which may have also induced the witness to have a fit.

Further work has lead Stuart to question his original findings. Whilst he now argues more strongly in favour of the stranger details of the case being caused by the witness having a fit, he now doubts that this could have been caused by ball lightning. This brings me back to the underlying theme of this editorial, having decided that the witness had a fit, should we dig deeper to find out why? I believe we should. Neither Stuart or myself are medically qualified, so any physiological evidence must be derived from the report of Pat Hannaford who is. But the UFO investigators can suggest possible stimuli for such an event.

Stuart originally wrote to me to ask if I would consider publishing a new theory to explain the Livingston case which he felt would be quite controvesial. I informed him that if he presented evidence for his theory that it should be opened to a wider audience for constructive comment. Only be presenting theories and evidence for comment can we hope to achieve anything. I imagine that Stuart's theory will attract a great deal of comment, which I would encourage. I would stress, however, that it is not good enough for a reader to state that they do not like this theory or that it is rubbish, a case will need to be made as to why Stuart is wrong.

The scientific method works by somebody putting forward a theory and presenting evidence for this theory. Other people not only have different experience and evidence of

(continued on page 94)

GLOBAL DISTRIBUTION ANALYSIS OF REPORTED CLOSE ENCOUNTERS AND OTHER EXTRAORDINARY EVENTS (1868 - 1973).

T.R.Dutton

26, Carleton Road, Poynton, Stockport, Cheshire, SK12 1TL.

ABSTRACT

The following paper was entered for the Cutty Sark/New Scientist competition held in 1979 to write a scientific paper about the study of Unidentified Flying Objects. Although not selected as the winner, it was highly commended by the panel of scientist judges. The paper presents, in more precise and numerical terms, the work described by the author in his lecture "Probing the UFO Timetable" which he gave to a BUFORA meeting at Kensington on 5th May 1979.

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INTRODUCTION

One important aspect of twelve years' spare-time study of some of the most puzzling UFO incidents on record is described. The work began with an investigation of events reported within the U.K. during 1967 but, later, was expanded to include world events recorded over a period of 105 years.

The prime objective throughout was to determine whether a scientific case could be constructed to support the popular belief that the Earth has been (and continues to be) visited by extra-terrestrials. By this paper it is hoped to demonstrate that a prima facie case has been produced which now awaits confirmation and further development.

The limits of space reduce the contents of this account to a summary of the essentials. As will become apparent, a full scientific treatise on the work described, plus its anticipated developments, would constitute a major thesis.

SELECTION AND PREPARATION OF DATA

Close encounters of the first, second and third kinds are defined by Dr J. Allen Hynek (1). Reports were selected from references 2 to 5 and from the author's files. Many described extraordinary events which, if taken as read, seemed to involve controlled vehicles of unknown origin and, sometimes, encounters with intelligent biped creatures alien to Earth. A few unusual fireball events were also included in the selection since, on rare occasions, such events were linked with subsequent close encounters.

Latitude and longitude co-ordinates for each event were established using references 6 and 7. Reported times for U.K. events were converted to G.M.T., corrections for B.S.T. being applicable for 1916 onwards. It was not practicable to correct the times quoted for occurrences in other parts of the world because the time standards referred to were not included in the reports. Nevertheless, it was decided to use the uncorrected information on the assumption that the times quoted might not be too far

Global Distribution cont...

removed from Solar time. (The coherence of the subsequent results seemed to vindicate this decision).

For the period 1868 to 1971, the number of reports selected from references 2 and 3 and processed for geographical distribution studies was 435. Unfortunately, some of these did not include time of occurrence statements, which reduced the number available for time studies to 368 and the historical period to 1885 to 1971.

A further 159 reports from the U.K. (covering 1952 to 1973), extracted from references 4 and 5 and from the author's files, were processed for a checking exercise.

PRELIMINARY STUDIES

Global studies began in 1973, using data for the years 1868 to 1954 from reference 2 only. The search for indisputable evidence of planned expeditions from space began with a straightforward plot of all the available sets of latitude and longitude co-ordinates (150 cases). This was unenlightening, since most of the events were concentrated in a few favoured areas in the Northern Hemisphere, but by selecting out a set of 24 events involving entry into or departure from lakes or seas, a number of Great Circle distribution arcs were able to be approximated. These Great Circle arcs, generated by three or more well spaced points could be identified by their maximum latitude (in degrees North) and their longitude at the point of maximum latitude. This data is shown in Table 1.

This work was summarised in

TABLE 1.

Max. Lat.	Long. at Max. Lat
43/44N	70 W
52 N	177 W
53 N	90 W
54 N	20 W
54 N	157 W
67 N	57 E
76 N	48 W

reference 8. Nevertheless, it was realised that space objects travelling in Earth-orbital or atmospheric entry modes do not generate Great Circle arcs in geographical terms, due to the rotation of the Earth about its polar axis, but that such arcs are traced out on the Celestial sphere. Hence, it was argued that planned incursions from space might be more easily recognised if referred to the star field; in which case, the most meaningful and convenient event co-ordinates would be the latitude, solar time and date of each occurrence.

DISTRIBUTION IN TIME

To facilitate the identification of favoured distributions (or tracks) relative to the fixed stars, ten dates, equally spaced throughout the year, were chosen as focal points for the temporal analysis. The paucity of data at any particular date made it necessary to incorporate a scatterband of plus and minus eighteen days about each nominal date. Fortunately, another data source became available (3), which increased the number of timed reports from 83 to 368 and extended the

TABLE 2.
NUMBER OF POINTS USED TO CALCULATE TEMPORAL DISTRIBUTION

Nominal Date	Northern Hemisphere	Southern Hemisphere	Totals
Jan. 10	27	7	34
Feb. 14	20	9	29
Mar. 22	31	9	40
Apr. 27	33	7	40
Jun. 3	24	7	31
Jly. 9	31	5	36
Aug. 15	42	1	43
Sep. 21	35	2	37
Oct. 28	50	7	57
Dec. 3	19	2	21
Totals	312	56	368

historical period forwards from 1954 to 1971. For the additional data the collection band about the nominal date was reduced to plus or minus nine days. The numbers of points available for plotting at each were then as shown in Table 2 (above).

SOLAR TIME STUDY

On plotting out the above points (latitude Vs time of day) it became immediately apparent that Great Circle arcs had been generated by them, this suggesting that some form of planned extra-terrestrial activity had been discovered. These arcs were substantiated and others defined by the use of curve matching techniques, the usual scatter of points about any arc being within plus or minus

twenty minutes of time or plus or minus one degree of latitude in the vicinity of maximum latitude. On consideration of the magnitude of the possible errors, this seemed to be a remarkable result.

Table 3 summarises the results of this graphical exercise. Some idea of the definition of each arc is given by the number of points on the arc and its span in hours. (A span of 6 hours corresponds to 90 degrees of equivalent longitude). On this basis, it can be seen that the arcs were generally adequately defined, and in some cases the definition was excellent.

Since most events occurred in the northern hemisphere, the Great Circles were identified by their maximum northern

Global Distribution cont....

Table Three

SUMMARY OF RESULTS FOR THE SOLAR TIME AND SIDERIAL STUDIES AT VARIOUS DATES.

Jan.10				Feb.14				Mar.22				Apr.27				June 3			
Solar Time at Max. Lat. N	Max. G.C. Arc	No. of pts.	Arc Span	Solar Time at Max. Lat. N	Max. G.C. Arc	No. of pts.	Arc Span	Solar Time at Max. Lat. N	Max. G.C. Arc	No. of pts.	Arc Span	Solar Time at Max. Lat. N	Max. G.C. Arc	No. of pts.	Arc Span	Solar Time at Max. Lat. N	Max. G.C. Arc	No. of pts.	Arc Span
hr:mn	deg		hr.	hr:mn	deg		hr.	hr:mn	deg		hr.	hr:mn	deg		hr.	hr:mn	deg		hr.
08:00	67	3	7.3	<u>10:15</u>	52	5	24.0	10:10	67	4	13.6	11:35	53	5	24.0	10:10	54	3	24.0
07:10	58	3	7.0	09:05	67	3	7.3					<u>05:40</u>	43	4	10.0	10:05	55	4	24.0
06:00	43	3	7.3	07:05	54	3	4.2	<u>08:10</u>	58	4	16.2	<u>05:10</u>	54	3	9.3				
06:05	52	3	6.5	23:30	63	3	9.0	03:25	43	4	9.3	20:30	43	5	10.5	<u>02:00</u>	54	3	9.7
06:20	76	3	2.0	23:30	54	4	10.5	01:45	52	4	10.7	19:30	52	6	5.0	03:00	54	3	9.2
00:30	58	5	7.3	17:30	54	5	9.5	21:50	43	6	5.0	17:10	43	4	4.7	21:35	43	4	10.3
23:10	76	3	1.6	13:35	67	3	16.0	20:10	54	10	5.6	16:10	76	4	2.7	21:35	54	3	8.2
22:00	40	6	3.5	13:35	76	5	1.7	18:40	43	3	5.5	15:20	40	4	5.3	20:00	54	3	7.5
21:05	54	8	9.0					18:40	53	6	8.0	15:20	76	8	9.2	18:00	53	4	3.5
16:00	52	4	16.0					14:40	58	3	22.5					13:00	43	3	13.0
								12:30	54	4	22.5								

NOTES TO TABLE THREE

- 1) See text for explanation of items shown in boxes
- 2) No of pts represents the number of points used to construct the corresponding Great Arc
- 3) Arc span provides an estimate of the length of each Great Circle over which points are distributed. A span of six hours corresponds to ninety degrees of equivalent longitude.

Global Distribution cont....

Table Three cont....

SUMMARY OF RESULTS FOR THE SOLAR TIME AND SIDERIAL STUDIES
AT VARIOUS DATES.

July 9				Aug.15				Sep.21				Oct.28				Dec.3			
Solar Time at Max. Lat.	Max. G.C. Lat. N	No. of pts.	Arc Span	Solar Time at Max. Lat.	Max. G.C. Lat. N	No. of pts.	Arc Span	Solar Time at Max. Lat.	Max. G.C. Lat. N	No. of pts.	Arc Span	Solar Time at Max. Lat.	Max. G.C. Lat. N	No. of pts.	Arc Span	Solar Time at Max. Lat.	Max. G.C. Lat. N	No. of pts.	Arc Span
hr:mndeg.			hr.	hr:mndeg.			hr.	hr:mndeg.			hr.	hr:mndeg.			hr.	hr:mndeg.			hr.
11:40	67	4	5.0	06:00	63	3	3.0	05:00	54	4	6.7	09:25	43	4	17.3				
05:55	63	4	14.8	04:35	53	5	10.0	03:40	43	5	11.5	05:10	54	7	5.1	07:20	55	3	2.7
04:00	42	3	6.5	01:50	53	6	8.1	02:30	53	7	9.5	04:00	52	6	10.5	00:55	43	4	3.2
00:50	43	4	3.6	00:30	43	6	6.0	02:10	58	4	10.0	03:00	54	7	8.5	23:40	53	4	4.5
23:30	54	6	7.0	22:30	53	8	5.3	02:10	76	3	2.0	21:40	53	7	3.7	22:45	43	4	4.0
20:10	54	6	7.0	20:30	58	6	3.0	22:15	54	5	7.7	18:10	53	15	10.5	17:30	52	4	4.0
16:50	67	5	11.0	19:10	52	9	3.1	20:05	53	6	9.3	18:05	58	5	9.0				
14:40	43	3	4.8	12:30	43	3	24.0	18:00	44	5	7.3	17:05	44	4	13.0				
13:35	63	5	24.0					17:40	54	5	5.0	15:50	54	9	5.6				
												15:00	67	6	17.0				
												13:50	76	7	1.6				

NOTES TO TABLE THREE

See previous page for explanation

Global Distribution cont...

latitudes and the Solar times of events at those points. The number of arcs generated was unexpectedly large (88) but it was reassuring to discover that their equatorial inclinations (maximum latitudes) were, in most cases, the same as those established in the geographical exercise described in the preliminary studies. The most popular inclinations were 52 to 54 degrees (39 arcs) and 42 to 44 degrees (20 arcs).

THE SIDEREAL STUDY

To investigate the possibility of there being a number of common sidereal connections throughout the year, Solar times at maximum latitudes North from Table 3 were plotted against time of year (0 to 365 days). On this basis, a line passing through Noon on March 22nd (Spring Equinox) with a slope of minus two hours per month approximates to the time of transit of the First Point of Aries; that is, to zero Right Ascension (R.A.). Due to irregularities in the Earth's motion, this assumption of linearity is not quite correct, but it was considered to be an acceptable approximation in view of the 86 year period being considered (1885 to 1971).

A line with the same slope could be drawn through the succession of event times shown boxed in Table 3. These spanned 80 percent of the year, from February to October. Other strings of Table 3 times could be similarly linked but spanned smaller periods of the year. By trial and error it was decided that the best fit set of parallel lines through the points divided the 24 hour

timescale at each date into 22 equal divisions of 65.44 minutes. The meridian R.A. at maximum declination represented by each of these lines was then determined. These are listed in Table 4 under the heading "Best Fit Meridian R.A." and compared with the equivalent R.A. values of the times in Table 3. The deviation in minutes of each observation from the best fit R.A. is also given. The number of observations producing deviation within plus or minus 20 minutes from the nominal R.A. is 73, or 83 percent of all cases. For deviation within the limits plus or minus 21 minutes, these figures become 77 and 87.5 percent, respectively.

CHECK ON THE VALIDITY OF TABLE 3

Using additional U.K. data from independent sources (references 4 and 5, and the author's files), a compatibility study was conducted to check the Global findings. 159 significant events (covering the years 1952 to 1973) were obtained from these sources, 77 of which occurred within the ten 18 day periods being considered. Of this number, 68 (88 percent) were found to have occurred at times which were consistent with the global patterns described in the Solar time study and defined by Table 3. Further, the times of the remaining 82 events, reported in the periods between the chosen ten, were generally consistent with the observed constant sidereal relationships discussed in the sidereal study.

DEVELOPMENT WORK IN HAND

In addition to further checks on Tables 3 and 4 using more recent data samples, two computer studies are being

devised to explore the implications of the results already described. One involves an accurate assessment of the correlation between geographical location and time of occurrence of U.K. events, whilst the other is being designed to explore, further, the Global implications in geographical terms.

Some manual processing has already been done to aid the drafting of a procedure for the latter exercise. Exploring the hypothesis that the minimum time interval of 65.44 minutes at any date is somehow indicative (in a manner not yet clearly defined) of the orbital period of a very artificial satellite (see footnote), the shapes of the ground traces for both retrograde and progressive satellites with orbital inclinations of 43, 54, 67, and 76 degrees have been determined. It has been observed that the retrograde traces match a number of discernable geographical location trends generated by events reported between the years 1868 and 1971, for example, a trace with maximum latitude 54 degrees North and spanning the equatorial intercepts 72 degrees East and 116 degrees West seems to link a string of events in the Eastern seaboard States of the U.S.A. with events in the North Atlantic, the British Isles, Austria and Turkey.

Whilst the existence of an undetected system of continu-

ously orbiting satellites is hardly credible, these observations suggest strongly that in addition to favoured trajectories in space, well established tracks over the Earth's surface may have been followed, for at least 103 years, by whatever agencies are responsible for close encounter UFO reports.

CONCLUSIONS

UFO reports recorded throughout the world during a period of 105 years formed the basis for the exploratory work described in this paper.

Despite the approximations inherent in the analysis, it appears to have been demonstrated that it is possible to relate the locations and times of hitherto inexplicable terrestrial events with the trajectories of hypothetical space vehicles operating in Earth orbital or atmospheric entry modes.

It is suggested that these observations constitute a prima facie case for the planned surveillance of the planet by extra-terrestrial agencies, which now awaits corroboration. Further, if the existence of a well used stratagem is verified by exhaustive investigations, the procedures described could be used to facilitate the prediction of UFO events and their monitoring by mobile observatories.

The observations just described were developed to produce an orbital scenario which related

FOOTNOTE:

The minimum orbital velocity would be of the order of escape velocity, and a constant artificially induced acceleration towards the centre of the Earth of at least 0.8 g would be required; as would be the ability to change the plane of the orbit at will.

Table Four

TABLE SHOWING MAXIMUM DECLINATION OF EACH GREAT CIRCLE Vs MERIDIAN R.A. AT MAXIMUM DECLINATION

Best Fit Meri. R.A.	Jan.10			Feb.14			Mar.22			Apr.27			June 3		
	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.
	hr:mn deg.	hr:mn min.		deg.	hr:mn min.		deg.	hr:mn min.		deg.	hr:mn min.		deg.	hr:mn min.	
19:50	-	-	-	52	19:51	+1	58	20:10	+20	{43 54	20:04 19:34	+14 -16	51	19:08	-12
20:55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22:01	-	-	-	-	-	-	67	22:10	+9	-	-	-	-	-	-
23:06	52	23:12	+6	57,76	23:11	+5	-	-	-	-	-	-	-	-	-
00:12	-	-	-	-	-	-	54	00:30	+18	-	-	-	-	-	-
01:17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
02:23	-	-	-	-	-	-	58	02:40	+17	53	01:59	-24	-	-	-
03:28	-	-	-	54	03:06	-22	-	-	-	-	-	-	56	03:13	-15
04:34	54	04:17	-17	-	-	-	-	-	-	-	-	-	54	04:48	+14
05:39	40	05:12	-27	-	-	-	-	-	-	40,76	05:44	+5	43	05:48	+9
06:45	76	06:22	-23	-	-	-	43,53	06:40	-5	76	06:34	-11	-	-	-
07:50	58	07:42	-8	-	-	-	54	08:10	+20	43	07:34	-16	-	-	-
08:55	-	-	-	54,63	09:06	+11	-	-	-	-	-	-	-	-	-
10:01	-	-	-	-	-	-	43	09:50	-11	52	09:54	-7	-	-	-
11:06	-	-	-	-	-	-	-	-	-	43	10:54	-12	53	11:08	+2
12:12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13:17	{43 52 76 58	13:12 13:17 13:32 14:22	-5 0 +15 -1	-	-	-	52	13:45	+28	-	-	-	54	12:48	-29
14:23	-	-	-	-	-	-	-	-	-	-	-	-	43,51	14:23	0
15:28	67	15:12	-16	-	-	-	43	15:25	-3	-	-	-	54	15:48	+20
16:34	-	-	-	54	16:41	+7	-	-	-	-	-	-	-	-	-
17:39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18:45	-	-	-	67	18:41	-4	-	-	-	-	-	-	-	-	-

Global Distribution cont....

Table Four cont....

TABLE SHOWING MAXIMUM DECLINATION OF EACH GREAT CIRCLE
Vs MERIDIAN R.A. AT MAXIMUM DECLINATION

July 9			Aug.15			Sep.21			Oct.28			Dec.3			Best Fit Meri. R.A.
G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	G.C. Max. Dec.	Meri. R.A. at Max. Decn.	Dev. from Best Fit R.A.	
deg.	hr:mn	min.	deg.	hr:mn	min.	deg.	hr:mn	min.	deg.	hr:mn	min.	deg.	hr:mn	min.	hr:mn
43	20:02	+12	53	20:06	+16	53	20:05	+15	44	19:29	-21	-	-	-	19:50
-	-	-	-	-	-	-	-	-	53	20:34	-21	-	-	-	20:55
-	-	-	43	22:06	+5	54	22:15	+14	-	-	-	52	22:18	+17	22:01
42	23:12	+6	53	23:26	+20	-	-	-	-	-	-	-	-	-	23:06
-	-	-	-	-	-	-	-	-	53	00:04	-8	-	-	-	00:12
63	01:07	-10	-	-	-	-	-	-	-	-	-	-	-	-	01:17
-	-	-	53	02:11	-12	58,76	02:10	-13	-	-	-	-	-	-	02:23
-	-	-	63	03:36	+8	53	02:30	+7	-	-	-	-	-	-	03:28
-	-	-	-	-	-	43	03:40	+12	-	-	-	43	03:33	+5	03:28
-	-	-	-	-	-	54	05:00	+26	-	-	-	53	04:28	-6	04:34
-	-	-	-	-	-	-	-	-	54	05:24	-15	43	05:43	+4	05:39
67	06:52	+7	-	-	-	-	-	-	52	06:24	-21	-	-	-	06:45
-	-	-	-	-	-	-	-	-	54	07:34	-16	-	-	-	07:50
63	08:52	-3	-	-	-	-	-	-	-	-	-	-	-	-	08:55
43	09:52	-9	43	10:06	+5	-	-	-	-	-	-	-	-	-	10:01
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11:06
67	12:02	-10	-	-	-	-	-	-	43	11:49	-23	55	12:08	-4	12:12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13:17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14:23
54	15:22	-6	-	-	-	-	-	-	-	-	-	-	-	-	15:28
-	-	-	52	16:46	+12	-	-	-	76	16:14	-20	-	-	-	16:34
-	-	-	58	18:06	+27	{54	17:40	+1}	67	17:24	-15	-	-	-	17:39
54	18:42	-3	-	-	-	{44	18:00	+21}	54	18:14	-31	-	-	-	18:45

Global Distribution cont...

Close Encounter events to the orbital tracks of hypothetical short-term and highly unnatural satellites. The tracks were able to be related to fixed equatorial generators in geographical terms and to favoured locations on the celestial equator.

ACKNOWLEDEMENTS

The author wishes to acknowledge the co-operation received from individuals and amateur organisations in the collection of the raw material on which the analysis has been based.

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BIOGRAPHY

Roy Dutton is a professional engineer working in the aircraft industry. Applications have included spacecraft and aerospace plane feasibility studies, aircraft aerodynamics and performance and aircraft design optimisation by multivariate analysis.

His initial interest in the UFO topic was aroused during schooldays. Roy began serious spare-time investigation during the U.K. sightings wave in 1967. He was a member of DIGAP (Manchester) during the early 1970s and Roy has been a member of BUFORA since 1973.

A checklist of manmade features near sighting areas has been produced by Roy and is included as part of the BUFORA Investigations Handbook. In addition, Roy has presented two papers at BUFORA National Conferences and has delivered a lecture in London to BUFORA about his theories.

Roy has written a book on the subject called "UFOs - The End of the Myth" which is awaiting publication.

The author is keen to receive feedback from other researchers concerning this theory. Correspondence may either be directly to the author, or opened up to a wider audience through the correspondence pages of this Journal.

COMPUTERS AND UFOLOGY IN ITALY

Maurizio Verga

Via Matteotti 85, 22072 Cermenata (Co), Italy.

ABSTRACT

This paper discusses the use of computers in the study of UFOs in Italy. Maurizio has been one of the most active researchers in this aspect of UFOlogy. Besides discussing his own work in this area, the author discusses the work of other groups throughout Italy. In many respects this work is similar to that of BUFORA in the U.K. Mention is made of the Computer UFO Newsletter, which is a magazine devoted to the application of computers to UFOlogical problems. Maurizio is the editor of the Newsletter.

INTRODUCTION

The oldest Italian application of computers in UFO research dates from 1977. At that time a partial catalogue of the sightings taking place in Italy during the famous 1954 wave was established on an old mainframe. Since then the situation has deeply changed, the massive diffusion of micro and personal computers has allowed computing for UFO purposes on an individual level.

At the moment, in Italy there are from thirty five to forty people interested in UFOlogy in different ways (from the real "researcher" to the simple amateur) who own a personal computer. The most common machine is the Commodore 64, followed by the Apple IIe and IIc. Very few people own either a Spectrum or an IBM PC.

ITALIAN SIGHTINGS ON COMPUTER

In 1985 a project of storing the Italian case reports on a Commodore 64 computer was launched. A member of ICUFOS, the Italian Center for UFO Studies, prepared a special database program able to store all the fundamental data of a UFO sighting (date, time, location, reference code and

all known sources). This became the common program which members had to use to establish the computerized case reports for their own province. In fact the whole project was planned on a local basis so that a lot of people could directly help in collecting and storing the case reports on computer. Besides the Commodore 64 version, the software was written (in a more sophisticated way) also for Apple IIc and IIe computers, but the project works, essentially, on Commodore computers.

At the moment I am writing (May 1986), there are twenty files available, relative to as many Italian provinces, which contain a total of about 1700 events. According to ICUFOS forecasts, we should have the files of the other fifteen provinces, containing about another 1300 cases, before the end of 1986. A new version of these local catalogues has recently been developed using a well known powerful database program called "Superbase". This is available in versions for both the Commodore 64 and Commodore 128 computers. The transfer of data was a very quick operation as Superbase can store data coming from other database programs.

Computers in Italy cont...

The main aim of all this work is to establish a computerised reference catalogue (including UFOs and phenomena not directly associated to UFOs) able to supply all the basic data about a single event. The computer makes it possible to process these data in several different ways. ICUFOS is now planning to transfer the Commodore files to an Apple IIc (or another more powerful PC) to carry out quite complex statistical analyses.

OTHER ITALIAN UFO SOFTWARE

I have prepared a computerised version of my own catalogues (ITACAT, ITACAT N and TRACAT) about Italian Close Encounters for the Commodore 64. The resulting package (COMPITACAT) is made up of three series of programs plus a common demo. Each series includes a program with several texts screens displaying information about the work; a program with some graphics screens; a really powerful database (especially written for this purpose and able to process data in any way) and its own datafile. The package is available both on tape and floppy disc, together with written instructions. Beyond this, there is a demonstration version of the ITACAT database, running continuously by itself, which is suitable to be shown during conferences and meetings. Moreover, a more sophisticated version of all the three mentioned catalogues has been developed on the Commodore 128 through using the "Superbase 128" program.

Other Italian researchers have produced UFO software (programs and files). ICUFOS member Marco Bottaini, a professional programmer, is the author of our previously mentioned database for the

storage of Italian provincial case reports, both for the Apple and Commodore 64 computers. Furthermore, he deals with a work about foreign bibliographical references available in Italy. Sergio Bianchi wrote an interesting program (E.D.A. - Sighting Data Processing in English) for the Commodore 64. This is able to help the investigator calculate some "real"(?) parameters of a UFO observation. Another ICUFOS member, Paolo Toselli, is developing an important bibliography about technical and scientific papers and books of interest for UFOlogy, using an Apple IIc computer.

A COMPUTER NETWORK

Around the end of 1985 I launched a new project inside ICUFOS. It was the Computer UFO Network (Rete UFOlogica Computerizzata - R.U.C. - in Italian), an informal association gathering and co-ordinating all Italian UFOlogists and amateurs owning a personal computer.

RUC has many aims, but two are the chief ones at the moment:

- 1) the storage of Italian case reports on a local basis using the Commodore 64 computer, (see elsewhere in this article),
- 2) The composition of articles for the ICUFOS magazine on a computer using a common word-processor. Please remember that our official magazine is wholly published using computer technologies and from the second issue (Autumn 1986) we will employ an Apple Macintosh computer and a laser printer.

There is a Bulletin sent to all RUC members, with news about current work, new proposals for activities, projects and explanations about the way to

Computers in Italy cont...

use common software. A ambitious project of the Network seems particularly interesting: it refers to the establishment of a Bulletin Board System (like COMPUFOMNET in the USA) to which members connect via modems (3).

A SPECIAL NEWSLETTER

Since May 1985 there is a new publication entirely devoted to the use and application of computers in UFOlogy. This is called the "Computer UFO Newsletter". Written entirely in English, it presents articles from many international researchers about current works, projects, reviews of software, search for a common methodology and common software. Moreover there is a section where all available UFO programs (about twenty for different machines, including the Commodore 64, Apple II and IBM/36) or their printouts are offered at cost price. A major aim of CUFON is the establishment of a common standard for storing UFO data on microcomputers, as regards both the structure of the record and the database program. The Newsletter is published six times per year (2) and five issues are already available.

A more comprehensive article about the present use of computers in UFOlogy will be presented in this magazine in the near future.

NOTES

(1)
I.C.U.F.O.S. is the Italian Center for UFO Studies, the largest UFO organisation of the country. It has about 200 members, publishes a fine official magazine plus several other publications. Its foreign liaison office is :

c/o Edoardo Russo, C.so V.Emanuele 108, 10121 Torino, Italy.

(2)
To subscribe to "The Computer UFO Newsletter" just send 16,000 Italian lire (please ask for air mail rates) to the Editor :
c/o M. Verga, Via Matteotti 85, 22072 Cermenate (Co), Italy.

(3)
A Bulletin Board is similar to an electronic magazine, where people with a home computer and modem can ring up. Pages of information are transferred down the telephone line and displayed on the home computer screen.

(4)
For the record Maurizio states "I own a Commodore 128 computer with disc drive, printer, color monitor, tape recorder and about 1900 programs."

NEW PUBLICATIONS BY BUFORA.

The following two new publications are now available.

THE UFO WORLD '86

Compiled by Jenny Randles, THE UFO WORLD '86 highlights all the major cases, investigations and research that has occurred worldwide in the last twelve months.

MYSTERY OF THE CIRCLES

By Paul Fuller and Jenny Randles, MYSTERY OF THE CIRCLES is a highly detailed report of BUFORA's intensive study into a phenomena that has been reported regularly over the last six years. (see also p96.)

Price: £1.50 (inc P&P, £1.75 overseas)
From: A. West, 16 Southway, Burgess Hill, Sussex, RH15 9ST.

LIVINGSTON: A NEW HYPOTHESIS

Steuart Campbell

PREFACE

On 9th November 1979, Robert Taylor, a forester, had a close encounter with a UFO close to his home at Livingston in West Lothian. This incident has been reported in great detail elsewhere (1,2) so only a brief outline is presented here. Robert was working that morning in young plantations to the north of Livingston. At about 10.15, he rounded a corner in the track to face a large object hovering stationary above the ground. A few seconds later two mine like objects appeared from below the larger one. They attached themselves to Robert's trousers and tried to pull him towards the larger object. At this Robert passed out. When he recovered the objects had gone, but he noticed tears in his trousers. These trousers have been the subject of a recent report (3). Here, Steuart Campbell proposes a new theory to account for this event, and supplies evidence which can account for the damage to both Robert's trousers and to the ground.

ABSTRACT

It is proposed that the Livingston UFO report (1) was due to sight of a mirage of the planet Venus and that this unexpected stimulus resulted in the witness experiencing an epileptic seizure. Subsequently marks on the ground were thought to be associated with the (presumed) UFO 'event', but it is now proposed that these have an innocent explanation.

INTRODUCTION

It is clear that few are convinced by my ball lighting hypothesis (reference 2, page 34) to explain the extraordinary UFO report made by Livingston forester Bob Taylor in 1979. Even I was not very happy with it. I was worried by the lack of storm conditions and the inability of the hypothesis to explain precisely the ground 'tracks' and the damage to clothing. Nor was it very clear what precipitated the epileptic seizure, the most certain event. I have always wondered what simpler explanation I had missed. (I never rated the extraterrestrial hypothesis.)

Recently this simpler explanation emerged. Finding that many UFO reports, even notorious ones, were explicable in astronomical

terms, I decided to try the astronomical hypothesis (AH) on the Livingston Case (despite the fact that the incident occurred in broad daylight!). The result was suprising. Venus, at magnitude -3.7, lay at only three degrees altitude (3 degrees 13 minutes with normal refraction) on a bearing of 138 degrees, almost precisely the direction in which Taylor was looking (see Figure 1)! Moreover, Mercury was at two degrees (2 degrees 15 minutes with normal refraction) on a bearing of 139 degrees (i.e. they were in close conjunction)! Could the incident have been initiated by sight of Venus (and Mercury)?

THE ASTRONOMICAL HYPOTHESIS

It is accepted that bright stars and planets can sometimes be seen in daylight (for Hynek's comments on Venus see

reference 4), although, normally, it might be necessary for the Sun, and perhaps much of the sky, to be obscured by cloud. In this case, it seems that there was a clear sky. Figure 2 shows the cloud pattern at 0920 UT, almost an hour beforehand. At that time Livingston was covered with cloud. However there was clear sky to the north-west and a 15 mph (24km/h) wind from that direction. By 1015 UT the cloud must have cleared Livingston.

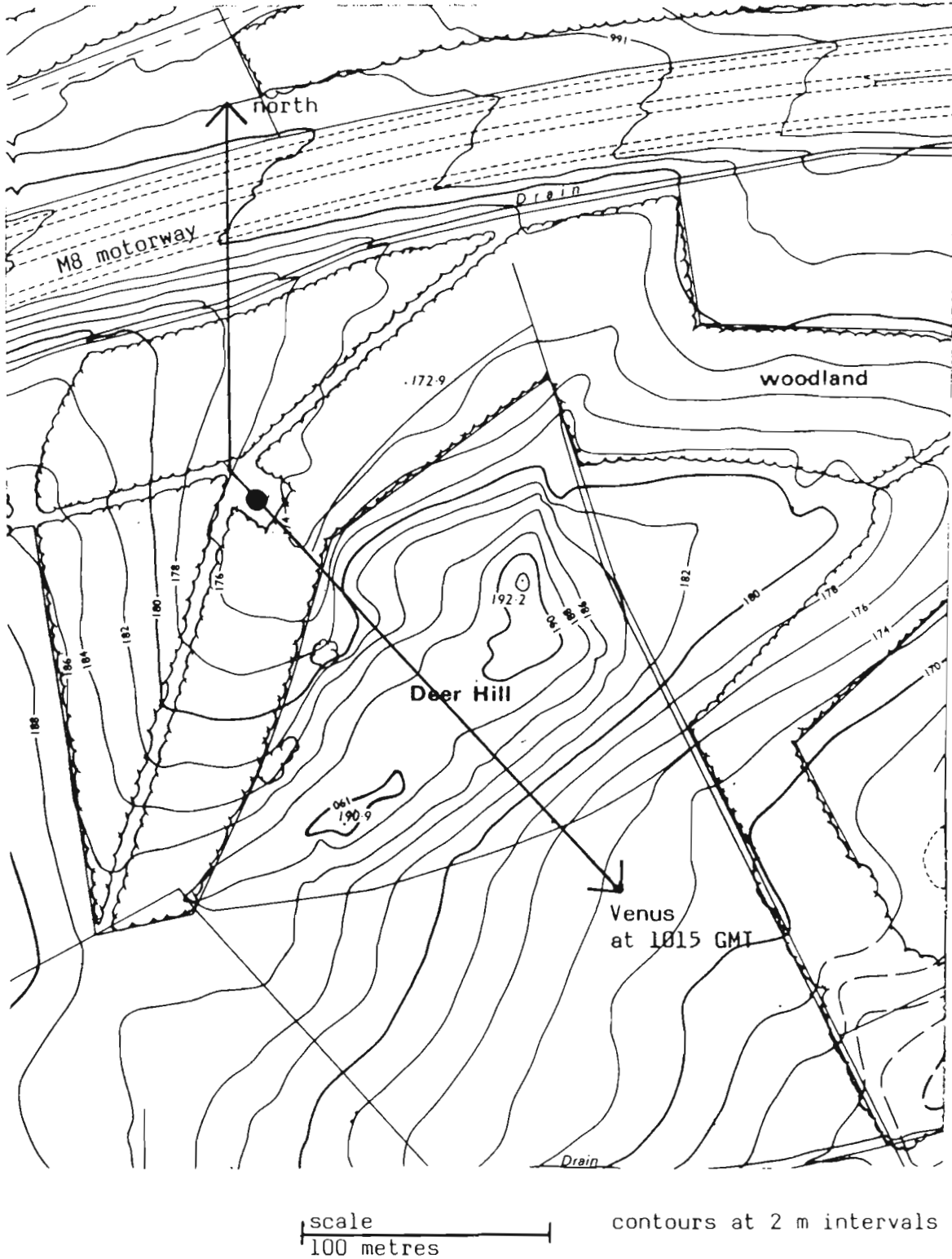
Few people can spot Venus in the daylight sky unless they know where to look, and even then it appears as a mere pinpoint of light. Of course one could argue that this bright point was sufficient to stimulate the seizure, the aura of which included hallucinations which account for Taylor's subsequent story. Epileptic seizures can be instigated by bright lights, especially scintillating lights. At low altitude even Venus will show scintillation.

Even if Venus was above the unobstructed horizon was it visible from within a forest? In fact Taylor was facing a clearing on the other side of which grew young deciduous trees which barely obscured the col of Deer Hill which formed his horizon to the south-east (see photograph). The altitude (angle of elevation) of this col (on the relevant azimuth) could be determined by use of a theodolite. However, I have been able to calculate the altitude from a 1:500 scale plan of the area supplied by the Livingston Development Corporation. The col was 11.73 metres higher than Taylor's eye-level at a distance of exactly 130 metres. This

represents an altitude of 5 degrees 15 minutes, apparently obscuring Venus! (If, as Taylor claims in his statement, the incident occurred at 1030 UT, then Venus was at 4 degrees, or 4 degrees 12 minutes with normal refraction, on an azimuth of 141 degrees, about one degree below the col.)

Clearly astronomy alone cannot explain the incident. It is now necessary to turn to meteorology (or, to be more precise, meteorological optics). All astronomical objects are viewed through the Earth's atmosphere and its influence has to be taken into consideration. Low altitude astronomical objects are particularly susceptible to atmospheric distortion, especially mirages. Superior mirages (i.e. where the image appears above the object) can result from atmospheric temperature inversions (where cold air underlies warmer air). Such inversions frequently form overnight in valleys, where, in calm conditions, cold air from hills drains down and settles under warm air in the valley. Now Taylor was looking across a valley, that of the River Almond (although his view of the valley was obscured by Deer Hill). At the time Britain lay on the edge of an anticyclone (see Figure 3) which brought relative calm and low wind speeds. At Edinburgh Airport (13 km away) the minimum temperature during the previous night was -1 degree C. It seems quite likely therefore that an inversion had formed in the Almond valley overnight and that it had not cleared by 1015 UT (it would probably not clear until the cloud cleared).

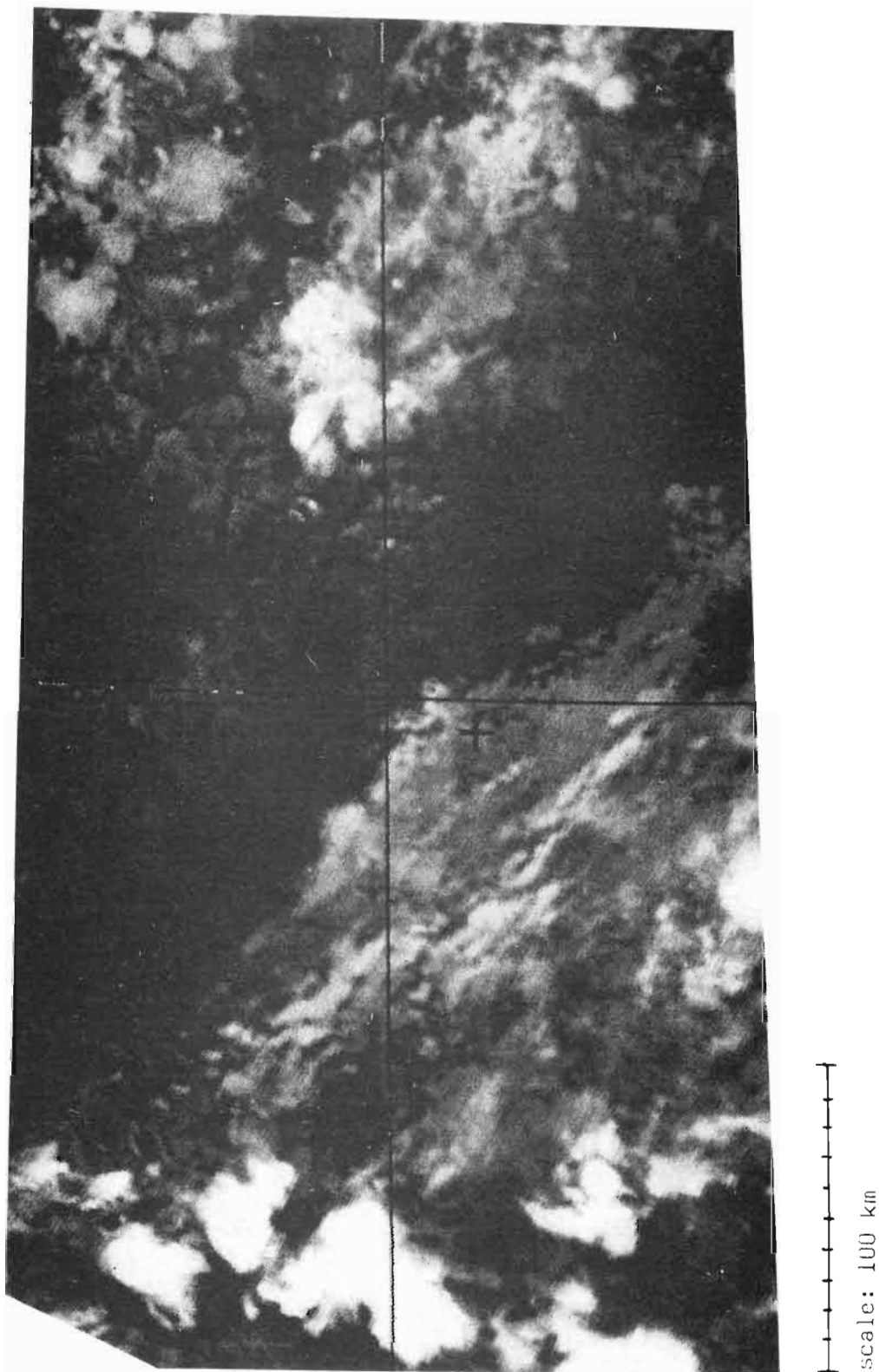
The effects of mirages were discussed at length by William Viezee in the Condon Report (5). The image in a mirage can



Plan of the site of the Livingston incident, showing the direction of Venus at 1015 UT (= GMT). The black disc marks the alleged position of the UFO. Plan by courtesy of Livingston Development Corporation.

FIGURE 1.

FIGURE 2.



The cloud pattern over Scotland at 0920 UT on 1979 Nov 09.
The cross marks the position of Livingston (within 5-10 km).
Picture from NOAA-6 satellite; copyright University of Dundee.

not only be severely distorted and enlarged, but it will be elevated a few degrees (in a superior mirage). In this case an elevation of only two degrees was necessary to place the mirage of Venus exactly on the col of Deer Hill. The AH presumes that this is what happened. Not only are mirages usually enlarged, they are brighter due to a phenomenon known as Raman brightening. Such brightening (due to focussing of the light waves) can have caused the image to become well visible even against the bright sky. It may be that Taylor saw only the top of the mirage, the bottom being hidden by the hill (see Figure 4, the original sketch). Without size clues he had no means of assessing its distance and perhaps it was inevitable that he would assume that it was hovering above the clearing.

The AH accepts the appearance of at least one other object (besides Venus) because of the close proximity of Mercury. That this planet (magnitude 0.4) was below and to one side of Venus is consistent with Taylor's statement that two (sic) smaller objects appeared from below the larger object. The inversion may have brought the image of Mercury very close to the level of the image of Venus. In fact it should be noted that two degrees below the unobstructed horizon, also on an azimuth of 138 degrees, lay the first magnitude star Antares, which may also have participated in the mirage. Sudden brightening of such objects can cause them to appear to rush towards the observer. The 'spikes' are explained as the typical rays caused by distortion in the eye.

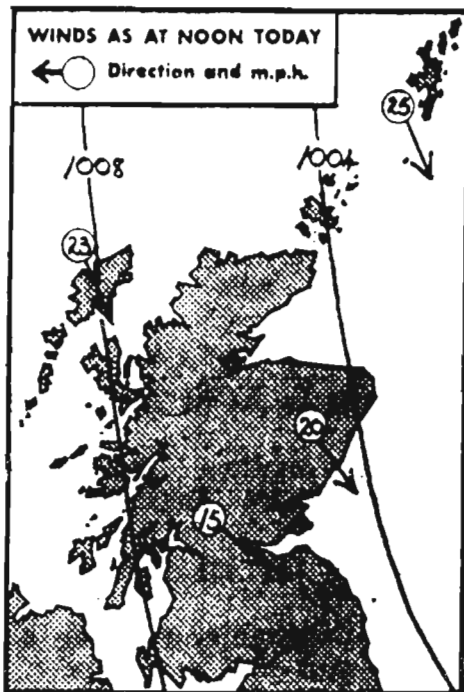
The AH claims that the

stimulus for the epileptic seizure was the shock of seeing the sudden appearance of the bright and strange mirage. If the approach of the 'spheres' was accompanied by a strong smell (indicating that Taylor had already entered the aura phase) then his account of events at that point, and from then on, may be based on a hallucination. Surely the idea that he was pulled forward must be a misinterpretation of the fact that he was in fact falling forwards. Any sound perceived must have been hallucinatory.

It will be asked how the AH explains the ground markings and the damage to clothing. Necessarily both of these data must be seen as having innocent and unconnected explanations. I had already noted how the 'track' impressions did not indent the soil, only the grass, and that they could have been the result of something lying in the clearing during the summer. It was also established that work on laying a pipeline had been undertaken within 100 metres until shortly before the event. In addition there was evidence that a vehicle had turned the corner where Taylor stood. All this suggested that some equipment connected with the operations had lain in the grass, even though Taylor said that he had seen nothing during previous tours. At the time I made no approach to the Water Authority (who had been laying the pipeline), but the arrival of the AH made it imperative to check Taylor's claim and to ask the Authority whether or not they, or a contractor working for them, had used the clearing.

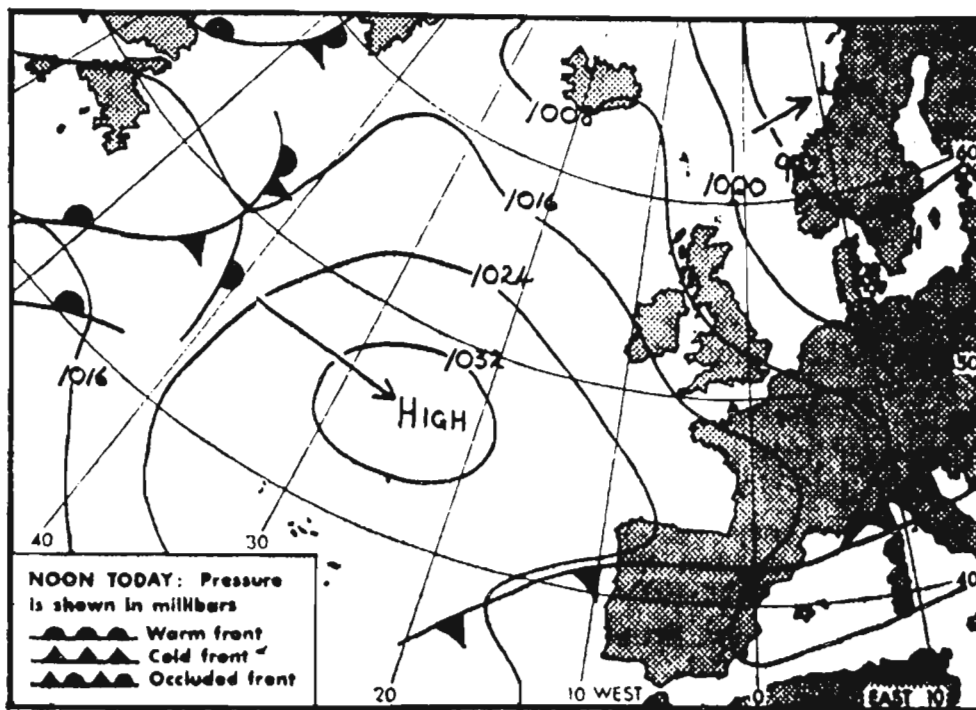
Recent enquiries have confirmed the fact that the Water and Drainage Department of Lothian

FIGURE 3.



All areas. — Wintry showers, sunny intervals, moderate accumulations of snow on high ground; wind north-west, moderate, increasing fresh; cold, maximum temperature 4 to 6 deg. C (39 to 43 deg. F).

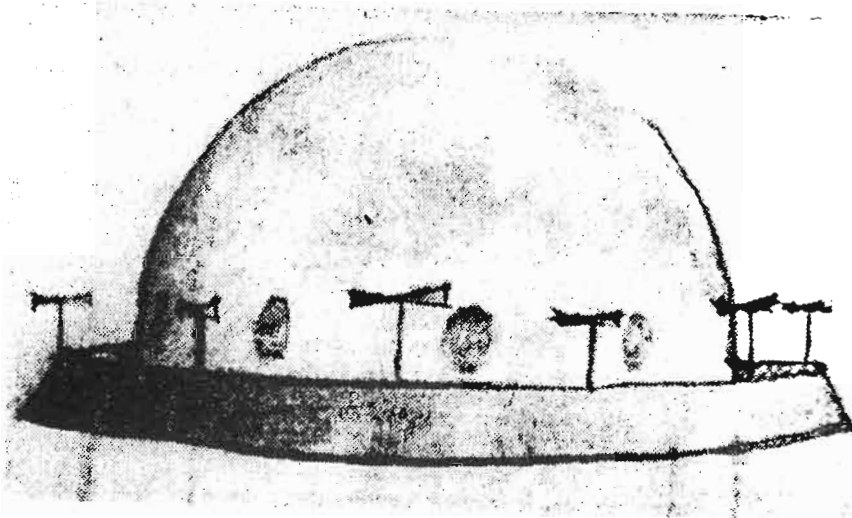
UK outlook. — Staying cold with overnight frosts and wintry showers. Some sunny intervals.



The arrows indicate the expected movement of the centres of depression and anti-cyclone from their position at noon yesterday to their forecast position at noon today. Depressions and anti-cyclones without arrows are either new or stationary.

Part of the weather panel from The Scotsman of 1979 Nov 09. The maps show the situation expected by 1200 UT on that day. Also shown is the area forecast.

FIGURE 4.



The first sketch of the object described by Robert Taylor (but not drawn by him). It is probably the top half of a mirage of Venus.



Apart from the fencing, this was Robert Taylor's view on 1979 Nov 09 at about 1015 UT. Deer Hill is at top left and the col, on which Venus could have been seen, is visible through the trees. (Photograph by Stuart Campbell on 1979 Nov 10, mid a.m.)

Regional Council did work in the area up until 9 October 1979. Moreover they employed a tracked excavator which, for part of the work, had to be taken through the clearing (twice a day for a time). The excavator was an International Harvester 125B which had been fitted with a JCB rearframe and excavator. The tracks were 330 mm wide, 2.6 metres long overall and 1.36 metres apart (centre to centre), and each track link was 150 mm long with a flat profile (I took these dimensions on inspection of the vehicle). The operator of the excavator, and other men employed on the operation, assured me that at no time had the excavator (or any other equipment) encroached on the area of the clearing where the anomalous marks were found. I concluded that these operations could not account for the central marks. The tracks of the excavator, although the right length were too close together and did not have the right profile. However, it was certain that the excavator was responsible for the churned ground in the foreground of my photograph. Recent enquiries to Livingston Development Corporation have turned up no other explanation for the marks; there is no record of other forestry operations in the clearing and the ground had not been let to any other party. Despite these negative conclusions I am convinced that the 'track' marks were the result of something lying in the grass and that the holes were caused by an implement of some sort. The investigation has not ceased in this respect.

The damage to the trousers has several possible explanations. One is that the damage existed before the incident but was not noticed until afterwards.

Another is that the tears were caused by the dog trying to revive her prone master, or by Taylor himself as he tried to reverse his vehicle. The graze on his thigh lends credibility to the last suggestion; I suggest that he slipped or fell, grazing himself and tearing the trousers at the same time.

CONCLUSIONS

The AH (although complicated) offers such a good explanation for this incident that it should be accepted as the correct explanation. Robert Taylor was startled by a mirage of Venus (with or without the participation of other astronomical objects) which sent him into an epileptic fit. The ground marks and torn trousers have no connection with Taylor's visual experience.

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COMPUTERS AND UFOLOGY - PART TWO

PAUL FULLER, Research Officer

83, Alresford Road, Winchester, Hampshire, SO23 8JJ.

ABSTRACT

Both the September 1985 and March 1986 issues of JTAP, and the November 1985 BUFORA Bulletin carried a form for a survey of computer usage amongst members. Preliminary results from this survey were carried in the March 1986 JTAP, however further replies now make it possible to extend this survey.

(Paul Fuller has a B.A. in Geography and a Postgraduate Diploma in Statistics. He works for Hampshire County Council Social Services Department where his responsibility is to provide regular statistical information from a computerised mainframe record system.)

Following my previous article (1) and further appeals made by BUFORA's Head of Research Steve Gamble, several more BUFORA members have kindly written to me expressing their interest in the use of computers and offering their help to the Association. Both Council and myself are very grateful to those members who are prepared to take a more active role in BUFORA's work, regardless of their limitations in time or computing expertise. Without continuing commitments such as these BUFORA's hard-pressed Council and National Investigations Committee will continue to be disadvantaged by administrative tasks such as replying to queries by interested members of the public rather than undertaking investigative work or planned research.

My previous article described some of the advantages to BUFORA that computers offered us and how these functions might be planned in the near future. Since that article appeared, Council member Mike Wootten has donated a Sinclair ZX Spectrum Plus computer to the Association. Since I currently have this device for recording the 1977 UFO cases,

I must confess that I have responded to my own questionnaire!

Twelve BUFORA members currently own a home computer, one of whom owns two similar machines. A further member intends to buy a computer and is prepared to offer his help in advance. The current state of hardware, BUFORA style, is as follows:-

MACHINE TYPE	No. of Members
Sinclair Spectrun	5
BBC Model B	1
Commodore 64	1
Apple IIe and II+	1
Triumph Adler	1
Amstrad CPC 464	1

The total amount of internal storage (RAM) is nearly 700 kbytes, although over a third of this is accounted for by the five Spectrum Plus machines.

Table 1 indicates how the fourteen respondents completed their questionnaire. For two respondents who did not own a computer, questions 3 to 11 were irrelevant and have been marked with a dash (-).

Computers and UFOlogy

Three respondents had access to other computing facilities, either at work or because of academic studies. Respondent D has access to two types of IBM PC (the AT and XT), with a varied range of word-processing packages and printing facilities, in addition to an IBM 3080 mainframe computer. Respondent H has access to two Apple II computers with hard disk storage. Respondent I, currently studying for a Degree in Computer Science, has access to a PDP 11/44 and a Honeywell 66/80 mainframe computer. The latter allows access to the Joint Academic NETwork (JANet) system, which links most university and polytechnic computers together. This may allow BUFORA's members to search relevant articles in the established scientific literature rather than taking many days searching manually through journal indexes.

Nine of the twelve respondents who owned computers used cassette tapes as their means of storage, five used floppy disks and three used micro-drives (shown as 'Other' in the table). Several respondents could use more than one method.

Ten respondents' computers had ports to allow communication and data transfer with other computers, but only three respondents owned modems. This means that because the respondents live in many separate locations (including the Netherlands), BUFORA would face prohibitive difficulties (especially cost) in exchanging and recording data via teleprocessing. It implies that BUFORA will have to restrict individual projects to individual users, relying upon postal delays for data

exchange.

Seven respondents indicated that they have statistical programs (usually record systems) on their computer and seven respondents stated that they had attempted to store some form of UFO data on their computer. This ranged from BUFORA's own Case Report Database, designed by Mike Wootten (2), to the impressive UFODOC catalogue of Dutch and Belgium cases being recorded by Henry Kamherbeek (3). All but one respondent was willing to become involved in future recording of UFO data, even though my original questionnaire was quite vague in describing what this might mean!

Significantly, only four respondents (D,E,F & I) were in any way technically qualified in the use of computers or statistical techniques. This highlights one of BUFORA's main problems, the lack of scientific, academic or professional members familiar with modern scientific methods and tools. It must be hoped that such skills will become attracted to the Association as BUFORA undertakes more interesting and worthy research projects.

Finally, what must BUFORA do in the short term with the existing enthusiasm amongst this small core of members? It seems clear that the Association must decide which tasks described in my previous article (1) should be allocated to existing computer users, bearing in mind the problems of incompatibility between different machines and the inability to transfer data quickly between similar machines. Since we already have a Case Report Database using the Spectrum computer and Masterfile database package,

SUBJECT	Q1	Q2	Q3	Q4	Q5
A	Own	No	ZX Spectrum +	48K	Basic
B	Own	No	BBC Model B	32K	BBC MOS
C	Own	No	Apple Iie & II+	128K	PRODOS DOS3.3
D	Loan	Yes	ZX Spectrum +	48K	Basic
E	Own	No	ZX Spectrum +	48K	Basic
F	Own	No	Commodore 64	64K	Kernal
G	Own	No	BBC Model B	32K	BBC MOS
H	Own	No	Commodore 64	64K	Kernal
I	No	Yes	-	-	-
J	Own	No	ZX Spectrum +	48K	Basic
K	Own	No	Triumph Adler	64K	CP/M 2.2
L	No	No	-	-	-
M	Own	No	ZX Spectrum +	48K	Basic
N	Own	No	Amstrad CPC 464	64K	AMDOS/CP/m

NOTES TO TABLE ONE.

The numbers across the top of this table correspond to the numbers of the questions in the survey. The questions are as follows :-

- Q1. Do you own or intend to own a home computer ?
- Q2. Do you have access to any other computer which you might be able to use for UFO research ?
- Q3. What model/make of computer do you own ?
- Q4. What size memory does your computer have ?
- Q5. What operating system does your computer use ?
- Q6. What method of data storage does your computer use ?
- Q7. Does your computer have an RS232 or RS423 port ?

Computers and UFOlogy

O N E

Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
Cassette	Yes	Yes	Prestel	No	No	Yes	-
Disk	Yes	Yes	BEL-BASE	No	No	Yes	-
Disk/Cassette	Yes	Yes	DB Master	Yes	No	Yes	-
Cassette/Other	Yes	No	Masterfile	Yes	Yes	Yes	B.A.
Cassette/Other	Yes	No	Masterfile	Yes	Yes	Yes	HNC;M.Sc.
Disk/Cassette	No	No	Own	No	Yes	Yes	-
Cassette	Yes	No	BEL-BASE	No	Yes	Yes	-
Cassette	Yes	No	?	No	No	Yes	-
-	-	-	-	Yes	No	Yes	B.Sc.
Cassette	Yes	No	Masterfile	Yes	Yes	Yes	-
Disk	Yes	No	N/A	No	No	No	-
-	-	-	-	-	-	Yes	-
Cassette/Other	Yes	No	Masterfile	Yes	Yes	Yes	-
Disk/Cassette	?	No	DATAMAT	Yes	Yes	Yes	-

Notes to Table One, cont...

Q8. Does your computer have some means of communicating with other computers e.g. a modem

Q9. What database do you use ?

Q10. Do you use any statistical programs on your computer ?

Q11. Have you attempted to store UFO data on your computer ?

Q12. Would you like to be involved in any future recording of UFO data on your computer ?

Q13. Please describe any technical/professional/academic qualifications you have.

(The following reply was received from Ronny Blomme in Belgium but not included in the above table: He owns an Apple II with 64K memory. He uses both UCSD and CP/M systems and has disk and DBase II database. He has a degree in Mathematics)

Computers and UFOlogy

coding of old case reports should continue on this basis to allow a uniform record system to be kept at a central, easily accessible, location. This would be of immense benefit to researchers for many years to come.

How about the remaining respondents? Where do they fit into BUFORA's plans? This will depend partly upon the level of commitment offered by these members, but also on the priorities decided by BUFORA's Council. There are clearly many administrative tasks which would require the minimum of involvement from these members once simple systems or standard letters had been set up, and procedures set in motion. Remember the whole point of encouraging the use of computers is to minimise effort in administrative tasks whilst allowing more resources to be channelled into research activities. What is required now is a clear indication of BUFORA's short term research objectives so that existing enthusiasts will become more involved with the Association's work. The alternative is to allow this enthusiasm to wane and for the Association to suffer as a consequence.

REFERENCES

1. Fuller, P (1986) Computers and UFOlogy. JTAP, 4, pp 35-38.
2. Wootten, M. (1986) UFO Data Processing. BUFORA Bulletin July 1986, pp 22-27.
3. Henry Kampherbeek, Hengelo, The Netherlands.

The following people responded to the computer survey. The research department would like to extend their thanks to these people, the information provided will be of great use in determining future computing policy. The letter in the first column corresponds to subject in table one.

- A. Mrs A Cameron, Hampshire
- B. Mr K Carroll, Argyll
- C. Mr J Danby, Lancashire
- D. Mr P Fuller, Hampshire
- E. Mr S Gamble, Northampton
- F. Mr H Kampherbeek,
The Netherlands
- G. Mr J Lewis, Essex
- H. Mr G MacFarlane, Argyll
- I. Mr J McLennan, Aberdeen
- J. Mr N Mortimer, West Yorks
- K. Mr A West, Sussex
- L. Mr A Williams, Dorset
- M. Mr M Wootten, London
- N. Mr J Ickinger, W. Germany

FOOTNOTE:

I would like to add my own thanks to all those taking part in the survey. This information will be of help in drawing up a computing policy document. I hope to have this ready to publish in the March 1987 JTAP.

I see the use of computers as greatly aiding the business of research as well as their obvious uses in administration. The first step in this is the computer case index which will allow groups of cases to be identified for further research. STEVE GAMBLE.

TRAINING UPDATE.

Ken Phillips is now working on plans for further training courses to be held for investigators and other interested parties. He would welcome comments and suggestions about members training needs. Please write directly to Ken at:

16, Wedgwood Walk,
Lymington Road,
London, N.W.6.

TRAINING DAY

A second training course for 1986 will be held between 1pm and 6pm on Saturday 29th November 1986 at:

University of Manchester,
Catholic Chaplaincy,
Ambrose Room,
St Peters House,
Precinct Centre,
Oxford Road,
Manchester.

This is near the junction of Oxford Road with Booth Street. The venue is about half of a mile from Oxford Road station.

The theme of the training is "Anamnesis - A longitudinal Study of the Paranormal".

This is intended as a practical session which will build upon earlier theoretical sessions. It is hoped that witnesses will be available to be interviewed using both the anamnesis technique and more conventional questionnaires. A comparison will be made of the information obtained by these different means.

Some time will be set aside at this session for the discussion of future training needs and will cover what topics do we need, duration, location and frequency of

training sessions.

A small fee of £3 will be made to cover the costs of this session. This training session will be run jointly with ASSAP.

Make bookings to :

Val Hope
6, Pondwood Rise,
Orpington,
Kent.

PRELIMINARY NOTICE.

The Eleventh Annual General Meeting of BUFORA Ltd will be held at the London Business School, Sussex Place, Regent's Park, London, NW1 in the Lecture Theatre at 6:30 pm on Saturday 6th December 1986 to receive the President's Address, the Chairman's Report, the Report of the Council of Management for the year ended August 31st, 1986, the Accounts of the Treasurer and to elect the Members of the Council for the following year and appoint the Auditor according to the Articles of the Association.

BUFORA LECTURES.

Bufora meetings are normally held on the first Saturday of each month between September and June at the London Business School, Sussex Place, London, N.W.1. Meetings start at 18:30 and last until approximately 21:30 including a short break. Admission is £1.00 for members and £2.50 for guests. In the current session the following meetings will take place :

October 4th 1986
Speaker: Andy Collins

November 1st
Speaker: Maurice Grosse
Title: Enfield Poltereist

BUFORA News cont ...

Meetings cont...

December 6th
AGM followed by
Speaker: Ananda Sirisaena
Title: Buddhist Cosmology
(Note: There is no fee to attend the AGM, but charges to cover the following lecture will be made at the start of the evening.)

January 3rd 1987
Speaker: Paul Deveraux
Title: Earthlights Update

(Arrangements after January are provisional, lectures will be held on these dates, but speakers and titles to be confirmed)

February 7th
Speaker: to be advised
Title: to be advised

March 7th
Speaker: to be advised
Title: to be advised

April 4th
Speaker: to be advised
Title: to be advised

May 2nd
Speaker: Various
Title: Research Evening
This evening will consist of several short presentations on various aspects of current research, given by different speakers from the Research department and is a revival of the tradition started by former Director of Research, Tony Pace.

June 6th
Speaker: various
Title: Circles Review
This will be a review of progress during the year since the publication of BUFORA's report on circles in cornfields (edited by Jenny Randles and Paul Fuller, see elsewhere in this issue (pages 79 and 96.))

Editorial cont....
(continued from page 66)

the phenomena, but are able to bring new insights to a particular case. From these new insights different interpretations of the data may be made and new theories constructed.

In closing, I can do no better than extract some of the remarks of Stewart Campbell (4, p33) in considering if the case could be explained as an alien spacecraft. These remarks could apply for any case, any theory and in many fields outside UFOlogy. The prime objective is to set up a theory, test this theory against the known evidence or if possible carry out experiments to provide the evidence and, if necessary, to modify the theory. Campbell states :

"I am prepared to consider such an explanation if there is any evidence in favour of it."
"the onus of proof is on those who believe the hypothesis to be correct."
"Interpretation of the events of the encounter depends upon prior attitudes."

REFERENCES.

- 1) Gamble, S.J. (1986) Editorial JTAP 4, 33-34.
- 2) Gamble, S.J. (1984) The future of research. BUFORA Bulletin, Aug 1984, 24-27.
- 3) Hynek, J.A. (1972) Chapter 3, The UFO reported. IN: The UFO Experience. Abelard-Schuman, London.
- 4) Campbell, S. (1982) Close Encounter at Livingston. BUFORA ltd, Peterborough.
- 5) Campbell, S. (1986) Livingston: A new hypothesis. JTAP 4, 80-87.
- 6) Campbell, S. (1980) A natural theory of UFO's. JTAP 1, 52-60.

CORRESPONDENCE

USE OF COMPUTERS BY BUFORA LTD
- JTAP MARCH 1986.

Dear Editor-in-Chief,

Having just read the article "Computers and UFology" by Paul Fuller in the March '86 issue of the Journal of Transient Aerial Phenomena, I feel I must yet again switch on my trusty Apple, boot up the wordprocessor, and set down a thought or two on Mr Fuller's ideas and opinions. Whilst much of what he writes is correct and sensible, I feel that on some points he is quite wrong, and some of his opinions and conclusions are very unfair to members.

To take the last point first, Mr. Fuller, commenting on the sparse reply rate to his questionnaire, writes "..... this is pathetic..... BUFORA members are either too dim to use computers, or else they are not interested in finding out what UFOs are." What arrogant insolence! If Mr. Fuller would care to read his own questionnaire he would see the words "... if members who own or have access to a computer could complete the following questionnaire ...". From that I assume that the questionnaire is directed at members who own or have access to a computer, not to those members, possibly the majority, who do not own or have access to one. And to affirm that people who do not own computers are dim, or are uninterested in the UFO solution, is insolent to say the least. I would suggest that if Mr. Fuller, as he implies in his article, wanted replies from every member, in other words, a 'nil' return', he should have given more thought to the wording of his questionnaire. And to imply, in effect, that computers are

going to discover the solution to the UFO problem is just plain nonsense. They may facilitate the handling of data, but that is all. The answer, if we ever find it, will still require the application of good ol' Mark 1 grey matter. I believe there's still some of it about!

To qualify another point that Mr. Fuller makes in his comments on the questionnaire, he says that the total amount of storage available to the members who replied to his questionnaire is only 320kbytes. This is quite untrue. This figure is, I presume, the sum of internal RAM memory of the computers listed, whilst the "total storage available" is, as Mr. Fuller must realize, unlimited. It depends on the number of floppy diskettes (or cassette data tapes) the user can afford to buy! The question of online mass storage is a different ball-game entirely, a subject I will return to later in my letter when discussing the wider implications of computer usage by BUFORA. As a point of interest, my own computer can be expanded to 2.5Mbytes of internal RAM by the simple (but rather expensive) expedient of plugging in expansion cards. I only intend to add 1 Mbyte myself.

Mr. Fuller makes the further point that communication between the respondents to his questionnaire would be difficult and expensive. That depends on the type of communication required. ASCII text files, a pretty general form of data at our level, would require nothing more than a fairly cheap modem, some suitable unextravagant software, and a telephone of course. But the point is, is data transfer between 'the respondents'

Correspondence cont

really worthwhile, or even useful ? I think not. The matter of Membership Records doesn't require computer to computer transfer, it can be dealt with quite adequately by one individual on one computer. Similarly the production of the various publications emanating from 'Head Office' would be greatly facilitated by the use of computer aided wordprocessing, but again, by a single 'stand alone' computer. The question of incident records and bibliographic references is a different matter entirely. Obviously, a computer database would greatly assist the handling of this information, but it would preferably be maintained as a database which could be interrogated, by telephone, by any member, or other authorised person, having a computer, modem, and communications software. The member's computer wouldn't need to be anything fancy, any of the computers mentioned by Mr. Fuller could do the job. This is, I think, one very good reason for a central computer owned and maintained by the Association. However, this application, involving as it must large amounts of data, presupposes large amounts of online storage in the tens of megabytes range, and this means correspondingly large amounts of money! Personal computers are (fairly) cheap, hard disk drives of suitable capacity, and the necessary back-up facilities, are very expensive. Another very useful facility which a central computer could support would be a Bulletin Board. This would allow members to pass on the results of all the research they will be doing using the BUFORA database!

On the general use of computers by BUFORA I find

myself in (almost) complete agreement with Mr. Fuller, and also Stephen Gamble, who has something to say on the matter in a further article in the same issue of J-TAP. Obviously the facility of a 'central' computer would greatly assist the Association's activities, especially with regard to research, a field which would be hindered to some extent by the use of individual computers used in isolation. But the punch-line is cost, as always. The storage of large amounts of data, especially online, inevitably means an expensive system, so whilst it is undoubtedly worthwhile, can BUFORA afford it? I have found one unavoidable result of computerisation to be the generation of reams and reams of verbiage, printed by an ever ready printer, so I close this letter now, and remain,

Yours faithfully,

James Danby,
Preston,
Lancashire

16th May 1986.

CORNFIELD CIRCLES.

As many readers will be aware, Jenny Randles and Paul Fuller have been conducting research into the appearance of circular depressions in fields of cereals. The results of this study have been published as a small booklet called Mystery of the Circles, which is available from Arnold West.

Paul now wishes to extend this study and is keen to receive further reports of circles. He is particularly interested in earlier reports and those from other countries. He can be contacted at 83, Alresford Road Winchester, SO23 8JZ.

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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