

Luminous objects over La Souterraine

Jean-Claude Baillon

M. Baillon is president of the Cercle d'Information et d'Etude Scientifiques des Phénomènes Insolites (CIESPI) of Poitiers. Together with Messrs. Yannick Robuchon, Robert Robuchon and Georges Cartier he was responsible for the investigation which he describes. Translation by John C. Hugill.

ON September 3, 1969, a little before 4 a.m. local time, M. Laguide, a resident of La Souterraine (Creuse) was driving his friend M. Zamit to his home, "Bridiers", about 2 kilometres east of the town.

On reaching the junction of the R.N.142, on the edge of town just before the railway bridge, their attention was drawn to a light on the left (point No. 1 on the map). "When I turned that way, something caught my attention to one side behind the trees," said M. Laguide.

It was only after going on a few more yards that they clearly saw a luminous ball.

After losing it from sight for a few seconds behind various obstacles, they saw it again "almost along the same line as the road", at point No. 2 on the map. M. Laguide was very intrigued, and continued to drive slowly (a rally driver, he normally drives very fast).

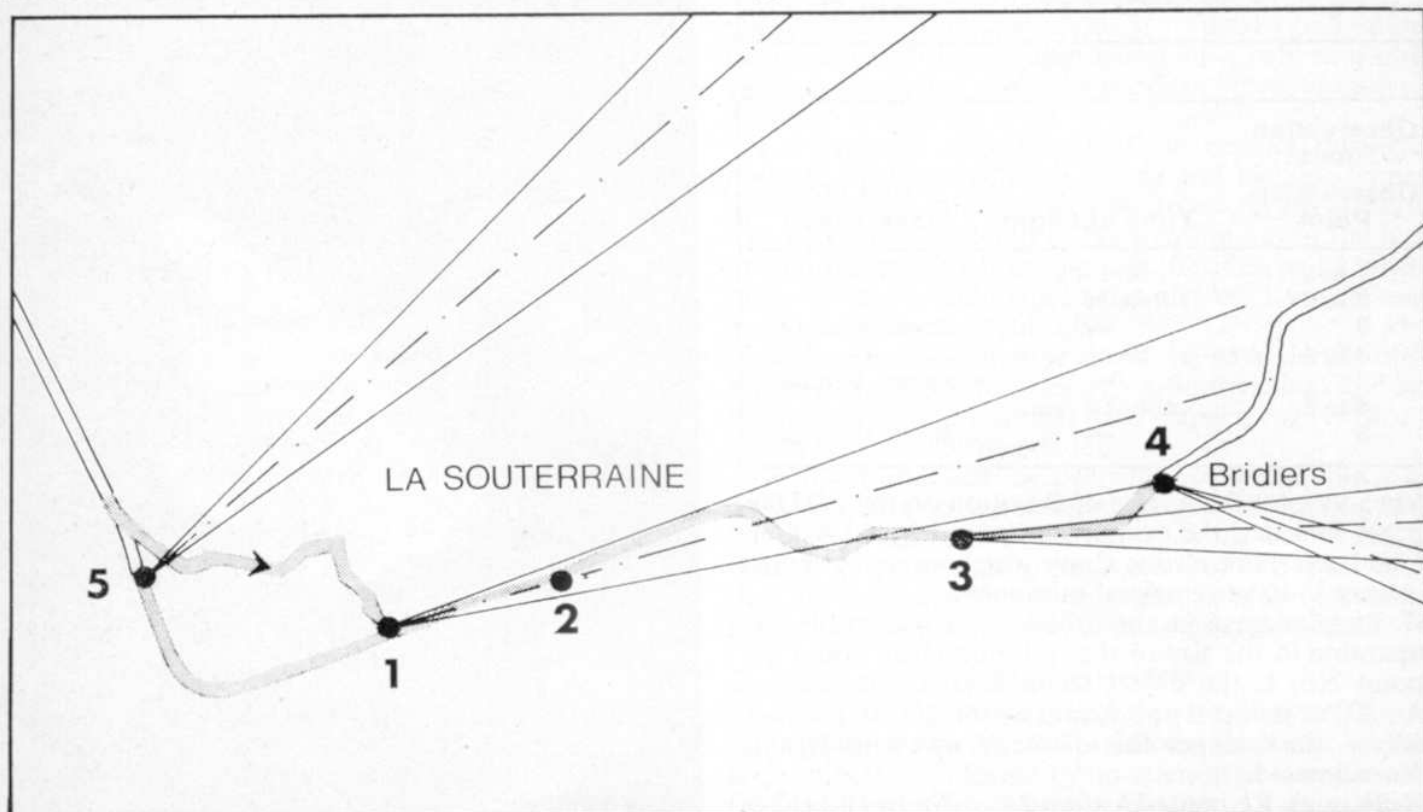
At this time the ball seemed to be following a rising curved trajectory (which seemed to be confirmed by the fact that at this point the road runs uphill and if the ball had maintained the same altitude, it would have seemed to come closer to the horizon). Furthermore, its size grew less. They again lost it from sight at a corner, and then found it again right in front of them. They stopped at a crossroad (point No. 3 on the map), got out of the car, crossed the road, and watched the object for a period of about ten minutes or so it seemed. Then a

kind of unease took them. They started off again, forked left on the R.N.151 bis, and stopped outside M. Zamit's house, about 180 metres from the crossroads (point No. 4 on the map). They again watched the ball for five minutes, and then Zamit went indoors and went straight to bed.

The photographs

For his part, Laguide suddenly thought of his camera, which he had left in his home when cleaning out his car. He returned flat out to La Souterraine.

When he got to the Place Amédée Lefauré, he found four insurance agents bound for a convention at Le Mans, and his own parents, who were all watching the luminous ball. Grabbing his camera (a Kodak Retinette IA, f/4.5) he snapped off one after another the last three exposures remaining on the film, on instantaneous exposure and keeping the same setting; however, he cannot be certain of what the aperture and shutter settings were. The odd fact however is that, on developing the film, it appeared that the image was completely off centre on all three photographs, high and to the right. This despite his assurance that he had lined up the object carefully. This off-centre effect could mean that the ball was moving, slowly but steadily, upwards and to the right.



Observation points on the road transversed by M. Laguide; photographs taken at point 5

After Laguide had taken his photographs, the witnesses went on watching the ball for about another quarter of an hour, until it disappeared "as if behind a cloud", although Laguide seems to remember that the sky was clear at the time of observation. A light persisted for some seconds behind this "cloudy mass".

According to the descriptions of M. Laguide and his mother, which were recorded separately, the object was very bright, to the extent that they could not look at it for long without a prickling of the eyes. It was white in colour, and its brightness was comparable to that of a neon sign.

After his photographs were developed, M. Laguide was able to establish that the object had a clear and complex shape and that it was surrounded by a halo which gave it the appearance of a luminous ball to the naked eye.

The witness entrusted his negative to us, and we were able to make a number of trial prints. We discovered that an over-exposure (up to 10 minutes at $G = X25$) was necessary to thin out the halo and reveal a clear shape.

Calculations

In the course of his enquiry, Jean-Louis Becquereau, a member of G.E.P.A., whom we thank for his very valuable help, worked out the following table of angles:

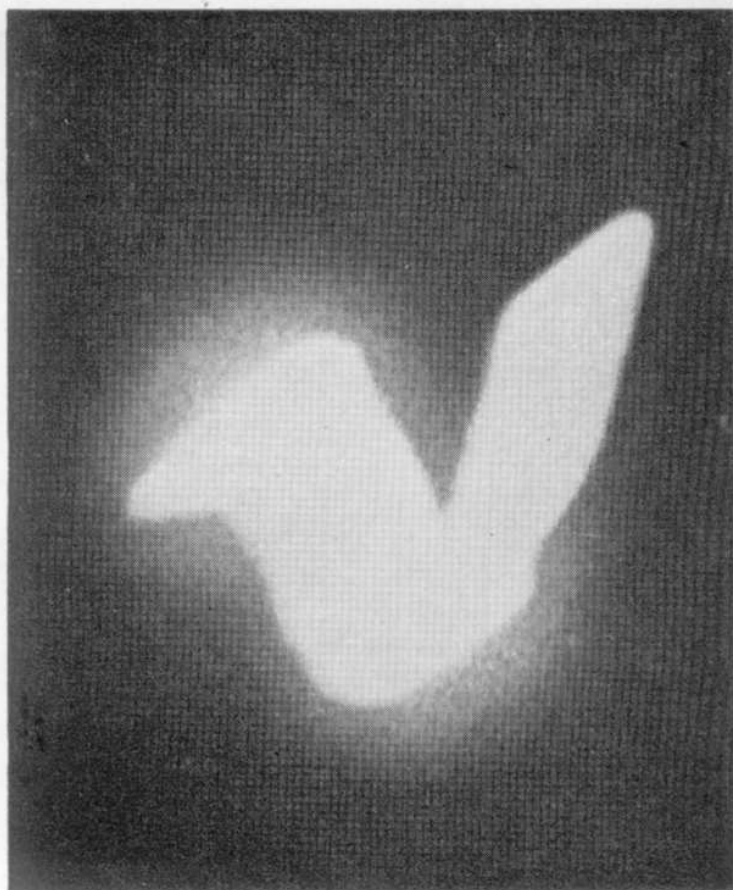
Observation Point	Azimuth	Elevation
1	$75^\circ \pm 5^\circ$	20°
2	$75^\circ \pm 5^\circ$	about 30° (less than 45°)
3	$90^\circ \pm 5^\circ$	20°
4	$110^\circ \pm 5^\circ$	20°
5	$50^\circ \pm 5^\circ$	about 20°

Observation Times:		
Observation Point	Time of Flight	Halt for Observation
1 to 2	30 secs.	—
2 to 3	1 min. 10 secs.	—
3	—	about 10 mins.
3 to 4	50 secs.	—
4	—	about 5 mins.
4 to 5	about 1 min.	—
5	—	about 15 mins.

When we plot the angles of elevation on the 1/25,000 map, we find that the azimuths at points 3 and 4 intersect, and determine a zone above which we may suppose the object to have remained motionless.

M. Laguide gave us the following estimates of size: comparable to the size of the full moon, say about 30° at point No. 1, the object to an angular diameter of about 20° at points 3 and 4, and about 10° at point 5. However, we shall see this diameter was considerably under-estimated.

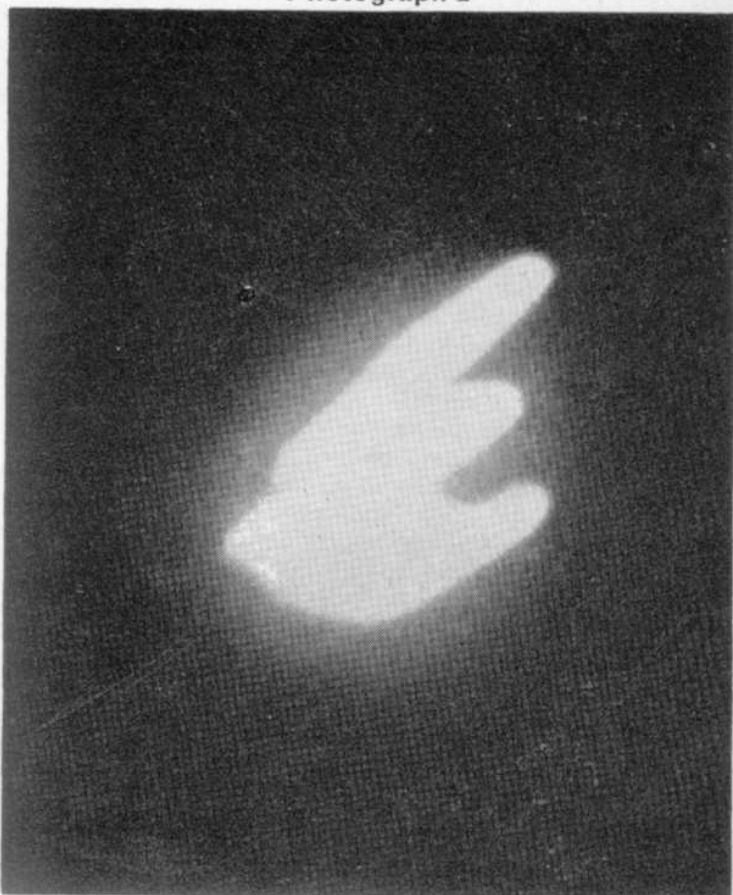
The Kodak Retinette IA (film 24×36) has a field of 43° , and image No. 1 on the negative is 1.8 mm. long.



Photograph 1

From this we can calculate exactly that the angular diameter of the object when photographed by M. Laguide measured 2° .

Photograph 2



Jean-Louis Becquereau asked the Met services Limoges station for the weather conditions in the region for September 3, 1969. From the reply of Meteorological Chief Engineer for the South West, M. Molenat, it emerges that "the sky was completely covered by 7/8 stratus cloud at between 240 and 280 metres and probably a layer of alto-cumulus at about 2,500 metres.

From this one can deduce that the object was slightly lower than 250 metres, and that it had a diameter of about 20 metres.

If we keep to the proportions suggested by M. Laguide (point No. 5—diameter = 10° and points Nos. 3 and 4: diameter = 20° —about double) we get the same diameter at the intersection of the mean azimuths at points 3 and 4 (see graph) taking an angular diameter of 4° .

It will be noted that, with sunrise at 06.11 (local time), an object with an angular diameter of 2° at an elevation of 20° , would have had to be at an altitude of at least 321 km. to be lit by the sun, and thus would have had to have a minimum diameter of 10 km. or so. No confusion could have occurred with the moon, then in its last quarter.

M. Molenat's letter, and the Met information gathered by the La Souterraine police, tells us further that a light wind (10 k.p.h. or so) was blowing from south south-west to south. If one examines the azimuth tables, it appears that the object must have been moving, during the course of the observations, perpendicularly in the direction of the wind.

This eliminates a second possibility, the radio-sonde balloon. M. Molenat prudently records that he had "no knowledge of the launching or descent of a balloon in this region; but of course this does not mean that there wasn't one!"

As the region is uraniumiferous, a third possibility comes to mind, namely plasma. However, time, for one thing, and the size of the object for another, combine to argue against this. As to time, it appears that the length of life of plasma varies from a few seconds to a few minutes (we refer the reader to the work of Prof. McDonald on the Klass theory) and in the present case the sighting lasted for almost an hour! As to size, that of plasma rarely exceeds a few decimetres. So we are left with the UFO hypothesis.

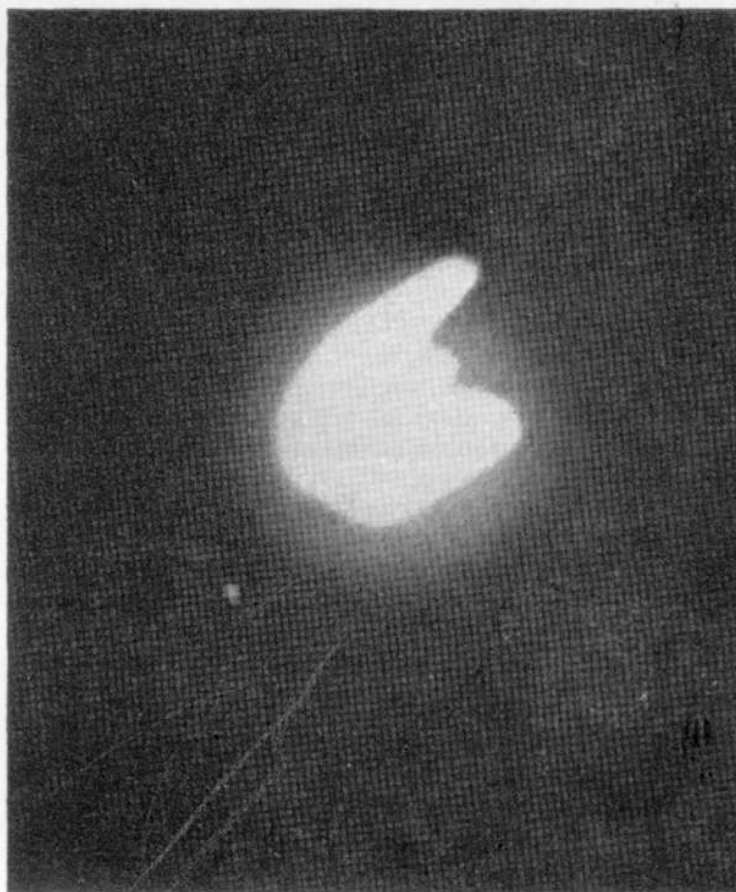
Dr. Guérin's suggestion

Finally, we must mention a very interesting theory propounded by Professor Pierre Guérin, Director of Research at the Astrophysical Institute of the National Centre for Scientific Research, to explain how the witness greatly underestimated the angular diameter of the ball:

"The only immediate answer is that the object photographed was emitting light in the ultraviolet and not in the visible band. The ball radiating in the visible band in the centre of the object was smaller than the phenomenon photographed." This theory would also explain the prickling of the eyes experienced by the witnesses.

Jean-Louis Becquereau having sent him the negative, Professor Guérin has authorised us to publish the following comments:

"1. Any detailed, or even approximate photometry is impossible when one does not know the exact



Photograph 3

exposure, aperture, or developing conditions.

"2. Anyone can photograph anything at night, against a dark background, without reference to the landscape (e.g. a lamp) and call it a UFO.

"3. If one accepts the honesty of the witness and the relevance of his snapshots to his visual observations, then one can bring up the matter of a halo and ultra-violet excrescences around the object since, visually, he only saw a ball."

For our part, in the course of conversation during the renewed meeting with this young and likeable witness, we were never able at any time to doubt his sincerity. The one fantastic detail of his sighting lies in the luminous form imprinted on the film. Besides, as he himself says: "If there hadn't been the photos, I would never have said a word about it."

Backed by this tangible proof, he gave details of his sighting to the authorities at La Souterraine, and sent the pictures to the regional daily paper *Centre-Pressé* of which he is the correspondent.

We then attacked the problem of determining a size corresponding to the different negatives, leaving aside the theory (arguable it is true) that the object did not change its form during its evolution. We must admit that the problem is a very complex one, and we submit it to whosoever has the patience to grapple with it.

Another incident

We have felt bound to append to this dossier a further sighting report by Mme. Barthelot, an account of which is given below, followed by an attempt at interpretation by CIESPI member Robert Robuchon, of the evolution of the object seen on September 3.

During one of our talks, M. Laguide told us of another interesting sighting at La Souterraine, a short time before his own. A CIESPI investigator, Christian Villevarlange, made enquiries on the spot, of which I later obtained details in correspondence with the witness.

On September 2, 1969, between 19.30 and 20.00 hours (thus nine hours before M. Laguide's sighting), Mme. Solange Barthelot, employed at the home of M. and Mme. Picoty, was alone at her employers' chateau at La Souterraine, with the Picoty's young son, aged 11.

The latter went outside to play while Mme. Barthelot was cooking. After a moment, he called her and she saw in the sky, which was still quite bright (the stars were not yet visible) a luminous object of unusual shape (see sketch).

"The object was very small in the sky (smaller than the quarter moon) but one could distinguish its shape very well. The outline must have been a little fuzzy, but had no halo. One could look at it without discomfort to the eyes." So wrote Mme. Barthelot, and later she added: "The two parts which formed the object were approximately of the same length."

The object remained motionless throughout the sighting, which lasted, say, between one and two hours. Very quickly it changed from yellow to red (or vice versa, Mme. Barthelot could not be sure of this point). During the change of colour she noticed no variation in luminosity. She then went back to her kitchen and when she came back a moment later, the object, still in the same place, had turned white.

It was almost overhead (60° - 80° above the horizon) and somewhat to the eastward. It then "disappeared as if hidden by a cloud, which was odd as there was no cloud in the sky that night."

The similarities between the two sightings will be noted, first the date and the place, but also the mode of disappearance, which is described in identical fashion by both witnesses. All the same, Mme. Barthelot said she had made the sighting without any prickling of the eyes.

M. Laguide went to see her on September 3 to talk about his sighting and showed her the photographs two or three days later.

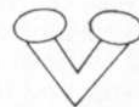
On seeing these photographs, Mme. Barthelot felt able to say: "There is a definite similarity in shape with the object I saw. I think also that the object in the photo (M. Laguide's photo No. 1) is the same as the object which I saw in the sky, but seen from a different angle."

Young Pierre Picoty had the presence of mind to make several detailed sketches of the object. He was kind enough to make another during Robert Robuchon's visit on June 28 last. This sketch exactly matches that by Mme. Barthelot.

Comments on the La Souterraine photographs

Percy Hennell

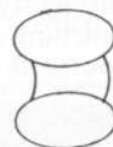
OBVIOUSLY I am in no position to hazard even a guess as to what it was that was photographed. The lack of information on the length of each exposure does not help, but if it had been in the region of one tenth to one second, the negatives are consistent with what I would expect to see from a luminous object which hovered, moved a little, and hovered again. Print No. 1 is consistent with a slow downward and upward



movement, hence the shaped ribbon of light, and the other two with short quicker movements and more prolonged hovering.

From the appearance of the images I would think that the object was cigar-shaped, or else, if circular, observed edge on, thus presenting an elliptical view. In photo No. 2 the pattern of movement is strikingly similar to that in one of the St. Leonard's photos* thus:

Stationary



Movement

Stationary

The movement pattern is usually less exposed and thus less brilliant than the stationary images. It is important to remember that against a dark sky, any number of images can be recorded of a single object on the same frame, if it moves from one position to another, just so long as the shutter is open. Another important point is that if the object is cigar-shaped or spherical, it will appear so from any angle, but if it is disc-shaped, it will vary from a circle to a narrow ellipse according to the angle of view. In several cases that I have examined for you the object, apparently, has been elliptical, but has changed its own angle to the viewer in successive photographs, and presented a circle or wider ellipse.

* See FSR, Vol. 14, No. 2 (March/April 1968).

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