

Evaluation of Witness Reliability in the Trans-en-Provence UFO Event: The Results of an Italian Enquiry

PAOLO FIORINO

*Progetto Italia 3 - Cisu - Centro Italiano Studi Ufologici
Via Buriasco 5, I-10135 Torino, Italia*

MATTEO LEONE

*Cisu - Centro Italiano Studi Ufologici
Via Barbera 66/B, I-10135 Torino, Italia
matteo.leone@usa.net*

Abstract - Among the UFO events with ground traces (Close Encounters of 2th kind in the so-called Hynek classification) a particular attention has been devoted to a single-witness sighting happened in Trans-en-Provence (France) on January 8th, 1981. Extensive investigation reports had been published in the past (Julien, 1981; CNES, 1983; Velasco, 1990; Vallée, 1990; Figuet, 1995). Analysis of biochemical properties of samples collected upon the landing site were carried on in a French Biochemical Laboratory (Bounias, 1990; Bounias, 1994). Apart from the physical evidence correlated with the trace, the witness reliability had been called into question by several French researchers (Figuet, 1995; Maillot, Scornaux, 1997). On September 4th, 1998, a field investigation had been accomplished at the witness' place. As the witness is of Italian origin and doesn't speak French well, a special attention was devoted to the linguistic and psychological sides. It was discovered that the contradictions in what the witness told to the enquirers along the years are due to lack of care and misinterpretations on the part of the ufologists rather than to real internal contradictions of the witness in itself. Further, it came afloat that alleged witness half-confessions of hoax were mere witty remarks turned in worrying bad faith hints due to linguistic and psychological misunderstandings. An other sighting explanation - based on an hypothetical altered state of consciousness triggered by a specific drug - turned out to be a rumor entirely without foundation. As our field investigation didn't give rise to item of proof such as to call in question witness trustworthiness and frankness, we conclude that the witness is a reliable one.

September 4th, 1998. It was not a very good day for making a tour of Provence (southern France). The sky was clouded and didn't look promising. However, our "mission" was too much important: we were aimed at Trans-en-Provence, a little village, three kilometers south of Draguignan, in the Var department. In the country around Trans there are several large garrisons: northerly, an artillery-park and the military field of *Camjers*; southerly, the *La Motte Ste. Roseline* military post and the paratroops school linked with the Luc-le Cannet airport. At last, the area is often flown over by training helicopters, coming from EALAT of Canets des Maures, Draguignan artillery, Frejus B.A.N. and U.S. Navy.

On January 8th, 1981, another object flew over - and landed in - the Trans-en-Provence commune. The sighting of such a UFO with ground traces - CE2 in the Hynek classification - has been inquired in the past by private ufologists and, above all, by the French scientific service GEPAN (*Groupeement d'Etudes des Phénomènes Aérospatiaux Non-identifiés*), at the time officially charged with the study of the UFO phenomenon in France on *Centre National d'Etudes Spatiales* (the French space agency) account (see CNES, 1983).

The methodology and results of trace analysis had been, via Jean Jacques Velasco (then director of GEPAN, now SEPR), instrumental in leading to the positive conclusions of Pocantico workshop regarding the UFO research: "it is desirable that there be institutional support for research in this area" (Sturrock, 1998).

The relevance of trace analysis of Trans-en-Provence, as opposed to the phenomenology of the sighting, was supported by the never forgotten father of French

ufology, Aimé Michel: "what it is noteworthy in this case are the people who studied it [...]. It is the way of acquiring data that is more interesting than others. There are thousands of sightings that, while richer than Trans, had not been studied in the same manner" (Bosson, 1993).

A doubt may arise from this in the reader's mind: if the main interest into the Trans case rests on traces disappeared 18 years ago, why to take now the trouble to cross the border with France?

It is already ten years since some French ufologists began occasionally urging us to go interviewing the [sole] witness of the most celebrated French UFO case. The final push came from the friend and ufologist Perry Petrakis, leader of UFO association SOS-OVNI, during his brief holiday in Italy on august 1998. Until then no Italian UFO researcher had spoken with the witness, Renato N., of Italian origin. There were several doubts regarding his witness, due to his bad mastery of French language (someone joked that his language was a sort of "French with Tuscan accent!"). During the last years, among the others, the French ufologist Michel Figuet – main private inquirer of the case – raised doubts regarding the witness, the nature of the object seen and the ground markings (Figuet, 1995).

At last, we took the decision of going to France. One of us (M.L.) read all what have been published about the incident, so to be updated as regards the main issues at stake. The other one (P.F.), intentionally didn't read nothing about witness and case, as a way of not pollute himself with preconceived ideas. What follows is a brief synthesis of what we discovered during and after the Trans-en-Provence expedition. A full report is available in Italian language only (Fiorino and Leone, 1998).

Previous Enquiries into UFO Sighting and Ground Marking

Before going into the results of our inquiry, let summarize what we knew about the incident following *Gendarmerie* (local police authorities), GEPAN and civilian research groups involvement.

January, 8th, 1981: Renato N., of Tuscan (central Italy) origin, saw around 5.00pm (local time) an object falling fast to the ground, following a straight path. After some seconds the object left again, in a similar straight and fast way, toward the sky. The landing site was a raised level ("*restanque*") close to the witness home. This is how the witness summarized the sighting to the Gendarmerie [excerpt from the English translation published in Velasco, 1990, p. 31]:

I was building a concrete shelter for a water pump. (...) My attention was attracted by a slight noise, a sort of faint whistling. I turned around and I saw a device in the air at the height of a big pine tree on the edge of the property. This device, which was not spinning, was coming lower towards the ground. (...) While it was continuing, I went closer by walking towards the stone cabin above my house. (...) I clearly saw the device resting on the ground. Right away it lifted off, still emitting a slight whistling sound. Reaching a point above the trees it left at high speed towards the forest of Trans, that is towards the northeast.

When the device lifted off I saw four openings below, through which neither flame nor smoke were escaping. The device kicked off a little dust when it left the ground. At that instant I was about 30m away from the landing site. Later I went to the spot and I noticed a circle about 2m in diameter. At certain places along the circumference of the circle were traces like abrasions.

When my wife came home in the evening I told her what I had seen. My wife thought I was joking. This morning [January 9. NdA] in full daylight I have shown her the trace of the circle. My wife called our neighbor Mr. X on the telephone. He came over with his

wife. I showed them the trace, too. It is then that they advised us to call the Gendarmerie.

The device had the shape of two saucers, one inverted on top of the other. It must have measured about 1.5m in height. It was the color of lead. This device had a ridge all the way around its circumference. Under the machine I saw two kinds of round pieces as it was lifting off, they could be reactors or feet. There were also two other circles which looked like trapdoors. The two reactors, or feet, extended about 20cm below the body of the machine. I have not felt any disturbance of the sense of vision or hearing.

The site of the sighting was visited by the Draguignan Gendarmerie on January 9th. The Gendarmerie listened the witness and, as stated by Renato, made the following discovery (Gendarmerie, 1981):

Behind the home there is a flat area of ground, 31m long and 11m wide. Of these 11m, 3m are taken up by a beaten path, and 8m are grassy.

Upon the 3m beaten path we observe the presence of two concentric circles, the first one 2.20m in diameter, the second one 2.40m in diameter. These two circles leave a crown 10cm wide. On this crown two diametrically opposed sections are visible, about 80cm long. These two sections present black striations similar to abrasion traces.

The Gendarmerie collected four samples: three samples of soil above and under the surface of trace, and one alfalfa (*Medicago minima*) sample. The process verbal was ended at 4.15pm and the telex to GEPAN was sent at 4.53pm.

In the afternoon came to the witness place several journalists of local newspapers (*Nice Matin*, *Var Matin République*). The first private ufologists arrived at the site on Saturday January 10th (Mr. Savelli and Monier from the group IMSA, then become CEOSE). The inquiry by Henri Julien (local representative of UFO magazine *Lumières dans La Nuit - LDLN*), one of the most detailed while not free from faults, dates back to January 13th (Julien, 1981).

Upon request of the biological analysis laboratory contacted by GEPAN, on January 23rd, the Gendarmerie collected new samples about 20m away from the trace. On February 17th, Jean Jacques Velasco, leader of GEPAN, came to the place. As stated by Velasco, "given the fact that this is a single-witness case (no additional witness was discovered at a later date) the GEPAN investigation (...) centered on the gathering of additional samples, especially vegetal samples" (Velasco, 1990, p. 33). It was collected 8 vegetal samples at various increasing distances of the trace, and one soil sample gathered outside of the trace area, 3 or 4 meters away. An additional batch of similar samples was collected 730 days after the observation as an a posteriori control of the natural variability on the same area (Bounias, 1990).

The soil samples were subjected to visual and microscope analysis at CNES - Toulouse (where is located the GEPAN headquarter), physical-chemical analysis at the SNEAP laboratory in Boussen, electronic diffraction studies at the Paul Sabatier University in Toulouse, mass spectrometry by ion bombardment at LAMMA analysis laboratory at Metz University, and spark mass spectrometry at the Laboratoire d'Analyses Physiques (LAP) based in Pau. According to the Note Technique N. 16 (Velasco, 1990, p. 46) the various analysis showed the following alterations:

In summary we find that a strong mechanical pressure, probably due to a shock, was exerted at the surface of the ground. Superficial modification of the structure (striations and erosion) took place. A heating effect which may have been caused by this shock, but which did not exceed 600 degrees, was subsequently observed. Foreign elements consisting in small quantity of iron (or iron oxide) over a limestone grain, and a small but detectable amount of phosphate and zinc were deposited at the site.

The alfalfa samples analyzed at the Biochemistry Laboratory at University and INRA - Avignon, made Prof. Michel Bounias to conclude (Bounias, 1990, p. 15):

The level of photosynthetic pigments decreased in all samples collected 1 and 40 days after the incident near the epicenter of the trace. Then, in samples collected 40 days after only, glucose contents increased. These observations, strengthened by the significant increase of variability in samples collected 40 days after by contrast with samples collected 730 days after, are characteristics of an early alteration of the photosynthetic apparatus, maintained and followed by a decrease in glucose utilization. [...] The significant correlations obtained by plotting the results with distances from the trace epicenter, suggest that the "thing" that happened globally elicited biochemical effects as a reciprocal function of the distance from the source. It is noteworthy that in some cases, such as for glucose, a d^2 dependent relation was evidenced, consistent with a radiative energy emission.

Upon the enterprise of Jacques Vallée, a pair of soil samples, that had been gathered at the same time as the main samples but that had not been used in CNES analysis, were subjected during 1988 "to a number of analysis at a large, well-equipped California laboratory with the capability to process both biological specimens and physical substances" (Vallée, 1990, pp. 22, 25). The analysis via optical microscopy, scanning electron microscopy and energy dispersive X-Ray lead Vallée to conclude that

The results of our analysis of the soil samples from Trans-en-Provence are consistent with the statements by the witness and his wife regarding the history of the soil. In particular, careful microscopic and physical analysis failed to detect any of the substances, such as cement or other construction and drilling materials, that have been proposed to "explain" the traces.

The modality of sample collections and the biophysical analysis carried on behalf of GEPAN had been harshly criticized by several French researchers. Among the objections raised: scarce number of collected samples (mining a conclusion of statistical significance), doubts about the storage procedures used in Gendarmerie collections and in GEPAN stockings (on this point see Mancusi, 1991), excessive lapse of time between the event and the GEPAN sample collection, gathering of samples restricted to a single linear axis. As an example of these, the Bounias analysis had been subjected to criticism by an anonymous Belgian phytopatologist (see "Critique de l'étude de monsieur Bounias" in Figuet, 1995, pp. 43-49).

As regards an assessment of the witness, Renato N. is deemed reliable by Velasco: "his own subjectivity does not seem to have impacted his testimony either on the affective scale [expectations] or on the cognitive scale [existing hypotheses]" (Velasco, 1990, p. 38). According to Vallée, "The hypothesis that the witness had engineered a hoax in an attempt to gain publicity was not supported by observation of his behavior, either at the time of the event, or in subsequent years" (Vallée, 1990, p. 21).

Of different opinion it was the French ufologist Michel Monnerie, who stated that Renato N. engineered a joke "to make a fool of upper classes people"; a joke that slipped out of hands with the Gendarmerie involvement (Monnerie, 1984).

Basing himself on the description of the noise listened by the witness during the sighting - described by Michel Figuet "alike to a helicopter one" (Figuet, 1995, p. 16) - and upon the fact that around 4.30 p.m. a military helicopter, took-off from EALAT at Canet-des-Maures, flew over the Trans area at a height of 200 m, French ufologist Eric Maillot expressed two hypotheses (Maillot and Scornaux, 1997):

- 1) Renato N., surprised at the helicopter fly, engineers a joke centered around a UFO and several traces left by the transit of vehicles upon his land, or

- 2) Under effect of drugs taken because of a heart disease, the witness doesn't identify the helicopter and its oblong shadow for what they are. After the disappearance of the transient vision, he discovers a mysterious trace that persuades himself of the object landing.

Maillot reported also two statements of Renato N., susceptible of being interpreted as implicit confessions of a joke. During the first of them, in the course of a installment of a TV show – *Ciel mon mardi*, broadcast on September 1989 by TF1 – the witness allegedly said: "The little word I wish to say in concluding, it's... Maybe I saw something, maybe it is a story. The proof, one can find it there on the ground...people, scientists may find something there, that's something else. I say, too, during the night, I dream." On another occasion Renato allegedly told to Figuet, with the presence of Henri Julien, that "There are so many silly people in the world. On some future day, I shall tell you the whole truth". (Maillot, 1995, p. 71; English translation in Maillot, Scornaux, 1997, p. 159).

"I look forward to that day with confidence" is the ending comment by Maillot.

The Sighting Site Today

The sighting site appears today as numerous raised levels of, more or less, uncultivated land, surrounded by a thick oaks and conifers wood. The raised level ("*restanque*") where took place the sighting, at the time presenting a 3 m wide beaten path, is now completely uncultivated and covered up by weeds, nettles and several small trees grown up in the meantime. While at present wholly impassable, in 1981 the level land was, according to the witness, often used as parking by vehicles owned by the tenants of a cabin placed in the upper level. At the entrance of the dwelling place is present a still working well, drilled, jointly with the home, in the years 1966-68. A second well (whose opening is still visible whereas covered up by a thick wild vegetation) was drilled to a depth of 32 m, almost 15 m away from the landing site, on August 24th, 1982 (more than 17 months *after* the sighting).

The Witness

The witness and his wife Jeanne, born in Tuscany (Italy) and emigrated in France for job reasons, looks a happily married couple. Both of them receive a pension (Renato, previously an employee of the S.C.N.I. company, receives now a disability pension due to a heart problem since 1973), and are carrying on a dignified life, devoid of economical worries. Although they have an outspoken dislike for the French people, they became a part of the social tissue without any problem of socialization.

Between them they speak Italian. Renato, in particular, has a very difficult mastery of the French language. He often does build sentences of difficult understanding due to vivid as well as ironical periods. His forming periods is made difficult by reasonings rich in often quite complex parenthetical clauses, and by an often lacking *consecutio temporis*. The witness does appear a sober person, time and space oriented. He does not make excessive use of alcoholic drinks. He does not use neither psychotropic substances nor narcotics.

He still uses drugs due to the past heart attack: Nifedipina and a xantinic derivative. It didn't surface the use of other drugs, like the Cimetidina (Tagamet), suggested by Figuet due to its possible collateral effects. The witness told us (and this was confirmed by the wife) that the sighting day he was in excellent psychophysical health, and he resolutely reject the allegations about a possible altered state of consciousness due to drug reasons.

UFO Sighting as Reported into the Diary

We discovered, during our meeting with Renato N., a formerly undisclosed piece of information dating the day of sighting, as he (still) keeps a diary, written late in the evening, before going to bed. From our partial look over the diary, it does appear that it hold the most important events of each day. It is an empirical collection, in chronological sequence, of phone calls (made and received), visits, carried out works, and so on. The events are reported in a detached as well as factual way. It is written in a common note-book. The language used is Italian.

For the date January 8th, 1981, jointly with annotations about several phone calls made and received along the day, it is reported the following verbatim quotation: "*Visto verso ore 17 atterrare un disco volante sul terreno qui davanti al capanno. Atterrato e ripartito quasi subito. Ero dietro a fare capanno per pompa dell'acqua*" (translation: "Seen around 5 p.m. a flying disc landing above the land here in front of the shelter. Landed and left again almost at once. I was behind doing the shelter for the water pump").

The event doesn't receive on the diary neither a particular emphasis nor a particular room. There is no mention of the trace. As regards the expression "flying disc" the witness, almost reading our minds, came earlier than ourselves by specifying that he didn't know how to call otherwise the object sighted. He told us that if he had spoken about green men, extraterrestrials, flying discs, this should not come as a surprise: "It is a language invented by you [as representatives of the community of ufologists. NdA] and I merely used it".

On the date January 9th he wrote: "*Venuto signor M. a vedere e chiamato gendarmeria*" (translation: "Came Mr. M. for seeing. He called the gendarmerie"). On February 17th there is the quotation regarding the arrival of GEPAN, or as wrote by Renato, the coming of "*Centro spaziale per il soucoupes volantes ovni*" (it is a miscellaneous of Italian and French: "Space agency for the flying saucer UFO").

Analysis of Controversial Issues Regarding the Structure of Sighting Report

Figuet (1995) raised several allegedly contradictory remarks made by Renato N. regarding dynamics of the sighting, witness' behavior and object's features. In what follows we examine such controversial issues in the light of what surfaced during our investigation.

- At the moment of the sighting Renato was building a concrete shelter for a water pump. This does support the results of inquiries by Gendarmerie (Gendarmerie, 1981), GEPAN (Velasco, 1990) and Figuet (1995). According to the other versions published, the witness was making a brickwork upon a raised level (Julien, 1981), building a wall (Guerbois, 1981; Caietti, 1981), or repairing a water pump (Petit, 1990, p. 120). These discrepancies are secondary or trifling, and very likely due to lack of care on the part of the investigators. About a different matter, it is possible that the version published in Petit (1990) is due to a misunderstanding of the Italian verb "*riparare*", which has a double meaning: "to shelter" and "to repair".

- While working around the shelter he side-glanced at the object descent from the sky. This makes the pair with the CEOSE (1981) investigation (glance attracted by an oval-shaped object). In Julien (1981) there is no mention of this fact, while both Velasco (1990) and Figuet (1995) concur that the attention of the witness was drawn by a sort of slight whistling sound ("*une sorte de sifflement léger*") similar to what we

may hear inside a car when the window is open. Renato described the sound with the words "*piccolo soffiettino*", rendered by him in French with the expression "*petit sifflement*". In English this may be translated with "slight whistling". He openly remarked to us that the sound was associated to the movement of the object: it was heard both in the landing phase and in the took-off one, but it was not heard when the object was stationary above the ground. To the deliberate leading question "how did you become aware of the object? Did you turn the glance owing to a sound, or...?", he openly answered, "No! (...) I saw something, side-glancing..." It would be interesting to read the transcription of interviews carried on by GEPAN and Figuet. We suspect the drawing of attention because of the "*sifflement*" is only a inquirer's inference.

- The object descended without any sound apart from the above-mentioned "*sifflement*". This is paralleled by the Julien and Figuet inquiries, but it is in glaring contradiction with the result of GEPAN (descent associated with a sound similar to a falling stone's one) and Petit investigation (object knocking against the ground and giving rise to a dull sound). These discrepancies are likely due to the verbs used by the witness. One of the first things he told to us was that on the famed afternoon "*è caduta un cosa*" indicative of a sudden movement rather than a knocking of the ground ensuing from a free fall. As a confirmation of this, during our interview with the witness, at a certain moment he pointed with the finger at the landing site and used the sentence: "*è lì che è cascato*". Many times he described the landing with the verb "*cascare*". In Italian language the verbs "*cadere*" and "*cascare*" mean "to fall" or "to go down". However "*cascare*", above all in the dialectal Italian used by Renato has a meaning of "going down" that does not imply necessarily a knocking the ground. The parallel with a "*pierre tombant au sol*" (translated in Velasco, 1990, p. 36 as "it fell like a stone") does refer to the movement of the object rather than to the sound produced in the impact (for other examples of this misinterpretations see Figuet, 1995, p. 16).

- As regards the stationary phase our findings concur with what discovered by other researchers: it seems that the object did land. The only anomalous datum is the synthetic Gendarmerie telex (January 9th), where there is a quotation of an object hovering at a 1 m height. On the contrary, the *proces verbal*/reports about a landing.

- The object did land without emitting noise apart from the slight whistling sound described by Renato in the *proces verbal*. The object took-off all of a sudden after about 30 seconds, while emitting "*il solito fischio*" ("the same whistling sound"). This is paralleled by all other investigations, apart from the CEOSE's where the sound is likened to a bee swarm one. However, as correctly remarked by Figuet, this is the result of a bad conceived leading question. The CEOSE investigators asked to the witness: "Was the sound similar to a bee swarm one?".

- Differently from what reported by Julien and Velasco, during the took-off phase, according to the witness, the object didn't rise dust.

- The object came from 120° ESE and took-off toward 70° ENE. Landing and took-off phase had similar dynamics (straight movements). This is confirmed by the whole body of reports.

- The disc-shaped object had "*un affarino*" ("a thin thing": he was referring to the ridge all the way around its circumference) 10-15cm wide between the two saucers. According to the witness the object was 2.5 or 3m in diameter and 1.5m in height. An identical estimate was reported by French newspaper *France Soir* (1984). In Julien the object is estimated as 2 or 2.5m in height thank to a comparison to the stone wall close to the landing site. There is no reference to a diameter estimate. In the *proces verbal* too there is only a height estimate: 1.5m. As a matter of curiosity, the telex reports about a base estimate only: around 3m. From the GEPAN inquiry it appears a greater uncertainty, on the part of the witness, as regards the height estimate: 1.7/1.8m. Estimated base diameter: 2.5m. Petit reports only a base estimate (2.5m). CEOSE estimate: diameter = 2.5m; height = 1.5m. According to Julien the object was

asymmetrical as more swollen in the upper portion. In the underside portion there were four "*secchi*" ("buckets"), or "*aggegetti*" ("small devices") two of them longer than the other two. According the Gendarmerie report they were 20cm in height. The color of the object was lead. The object description stayed unchanged in the whole body of journalistic and ufological enquiries. The sole exception would be the presence, reported by CEOSE investigators, of something like a bolt belt ("*comme una ceinture de gros rivets*"). When we informed him about such an allegation he joked with us about the presence of a forged iron - UFO, and he remembered to us a childhood recollection about a fellow villager who worked as forger...

- Following the object disappearance, the witness went in a sudden to the landing site, where he saw the trace. Late in the evening, the wife came back home and Renato told her about the event with an ironical notation: some little green men had carried back home their cat Bigoudi. By a coincidence the cat, missing for some days, reappeared at the very sighting evening. Next morning Jeanne told about the event to a neighbor who called the Gendarmerie. This is concordant with the other enquiries, with the sole exception of Petit who states that Renato showed to Jeanne the trace on the evening (unlikely due to the darkness of 9.00pm).

- Renato told to us of not having put, in the days following the event, any shelter for avoiding the people tramped upon the trace. When questioned "did others put something?", he answered "it seems to me that they made some marks as helps for finding again the trace". Anyway, the trace site was right on an approaching path of a (inhabited at the time) cabin close to his home. According to the witness the eventual presence of car tracks would not come as a surprise. However he told us being in disagreement with the hypothesis of a car origin of the trace (supposition held by Figuet). Renato reported to us that Figuet asked him why are present tire marks on the trace. The witness quoted to us his ironical answer: "How should I know? Perhaps the object had the wheels!"

In the end, as regards the several phases of the sighting, the [few] contradictions in what Renato told to the enquirers along the years seem to be due to lack of care and misinterpretations on the part of the ufologists rather than to real internal contradictions of the witness in itself. This is consistent with what surfaced from GEPAN investigation (Velasco, 1990, p. 38).

Analysis of Drawings

An examination of the witness' drawings based upon the measurements of geometrical ratios shows some interesting results. We asked the witness to draw for us a sketch of the object seen. In Tab. 1 are reported the measurements of ratio base/height inferred from the sketches realized by Renato upon request of several investigators. As ratio error estimates was used the Gauss propagation law:

$$\sigma_z = \sqrt{\left(\frac{\partial f}{\partial x}\right)^2 \sigma_x^2 + \left(\frac{\partial f}{\partial y}\right)^2 \sigma_y^2}$$

where x = base diameter, y = height. By replacing to $z = f(x,y)$ the function x/y , we obtain the value reported in table.

INVESTIGATORS (DATE)	SOURCE	BASE/HEIGHT
Savelli-Monier (10/01/81)	"Bulletin du CEOSE" 1, p.12	2,43 ± 0,02

Julien (13/01/81)	"Lumières dans la Nuit" 207, p.13	2,25 ± 0,08
Velasco (17/02/81)	<i>Note technique 16</i> , (GEPAN), p.23	5,75 ± 0,36
Corre (??/01/84)	"France Soir", 04/01/84	2,55 ± 0,06
Figuet (??/06/93)	<i>L'affaire de Trans</i> , p. 72	5,14 ± 0,19
Fiorino-Leone (04/09/98)	Report (CISU)	4,19 ± 0,21

Tab. 1 – Base/height ratio of several sketches realized by the witness

If the witness' estimates of diameter and height are correct, the base/height ratio should be around 1.7 – 2.0 (as his base estimate varies from 2.5 to 3 m). GEPAN obtained a ratio of 1.4 – 1.5. By analyzing the ratio set it is possible to split the values in two distinct subsets:

- a) on the one hand there are the drawings reported by Fiorino-Leone, Figuet and Velasco, where the ratio is between 4 and 6, and the sketched object looks fairly thin;
- b) on the other hand there are drawings reported by CEOSE and LDLN, where the ratio is not much higher than 2. (To these we should add the France Soir sketch. However, as its ratio is largely due to an unusually wide ridge along the circumference of the object, we hesitate to classify this sketch as CEOSE and LDLN ones).

The drawings of subset b) are much closer to the witness numerical estimate. As witness estimates do not show a large variability, differently from the sketch ratios, a doubt may arise regarding the witness reliability. Is this array of base/height ratio a hint of hoax on the part of the witness? Is it due to the "fog of time" (presumably thicker in a) subset)? Or, has the answer to be looked for elsewhere?

By comparing the witness' sketches another peculiarity catches one's eye: it is possible to split the set into two distinct subsets according to the sketches outline. This second pair of subsets tallies with the first one!

- i) The drawing realized on behalf of Fiorino-Leone, Figuet and Velasco are somewhat rough, devoid of fineries and details. These drawings represent a disc-shaped object, sometimes equipped with a median ridge, featuring two upside-down "buckets" in the underside. The buckets lower end is placed about at the same height as the object lower bilge. To these edge perspectives the witness used to add an underside view: a circle holding four small rings at angles of 90 degrees;
- ii) Both of the drawings published by CEOSE and LDLN show a skilled outline. The CEOSE one shows an unusual wealth of fictitious details (like the double bolt belt), while the LDLN one displays four appendages instead of two. This sketch depicts a swollen upper portion and looks as drawn from a frame of reference centered upon the witness. As the witness place of sighting was higher than the object's one, this could explain why the perspective drawing published by LDLN shows a vertical asymmetry.

Having seen the graphical skills of Renato, and by keeping in mind that it does exist among the UFO witness a bent to represent the object from an hypothetical edge (or lower or upper) perspective, we are inclined to think that sketches of subset b) – or ii) – owe their close agreement with witness numerical estimates to the "active collaboration" of the ufologists involved. Disagreements between sketches and estimates, far from being hints of hoax, are almost unavoidable due to the subjective nature of perception and memory.

Knowledge of the UFO Problem

As regards this issue, Figuet remarked that the cat episode shows that Renato did know the meaning of word "extraterrestrial". Similar words were used by the witness during our interview (like "little green men"). The sighting day he openly wrote "flying disc" (without giving to the episode an extraordinary emphasis). On diary page corresponding to February 17th he used the hybrid expression "soucoupes volantes ovni". These witness quotations are far from surprising.

According to a public opinion poll commissioned by the Italian civil research group CISU [*Centro Italiano Studi Ufologici*, Italian Center for UFO Studies] to the Doxa organization [sample of 1850 people, representative of the whole Italian population], less than 5 persons out of 100 have never heard speaking of UFO (Russo, 1987). Analogous data coming from foreign surveys extends this results to the word "flying saucers" (Durant, 1997).

This knowledge does not imply that the witness ascribes to the word an ETH tone. An ETH explanation meets the witness favor (as do other explanations, like those involving military remotely piloted vehicles), however he is careful in pointing out that it was not him who said having seen a UFO *as an extraterrestrial device*, but were the ufologists. His keeping of distance from equation UFO = extraterrestrial object had been repeated by him again and again during our conversations. As an example of this, at the beginning of our inquiry, he told to us a factual and far from theory-laden: "I saw a thing falling down".

A Case For Witness Reliability

Renato N. revealed himself a careful observer, aware of the faults of perception and memory when confronted with quick as well as old phenomena. Such awareness led him to show a moderate skepticism toward a UFO sighting recollection reported by Figuet. According to Renato, that recollection was exceedingly rich in details and quantitative evaluations.

As regards the Trans sighting, here follows a meaningful excerpt from our interview with him:

Question: Have you seen rising dust?

Answer: No, nothing.

Q: You have not seen dust. How it was the ground over there? Earthy? Grassy? (We were referring to the landing site.)

A: There was...soil...

Q: Therefore you didn't see dust. And...[pause]...Ok, that's ok.

A: *Anyway if you wish something more...*[ironical tone].

It is just the sense of irony one of the salient points of Renato's psychology. An irony rarely (or hardly ever) tracked by the investigators of Trans-en-Provence. An irony that passed unnoticed by Figuet and Julien when Niccolai told them "ci sono un mucchio di *couillions* nel mondo. *Un giorno vi dirò tutta la verità*" ("there so many silly people in the world. On some future day, I shall tell you the whole truth"). That same irony escaped Figuet's notice when Renato told to him, "*un giorno scriveremo un libro che conterrà tutta la verità*" ("one day we will write a book for telling the whole truth"). These sentences, far from hinting at an hidden truth, were merely expressing the witness' wish to lead astray *French* people who take themselves too much seriously. Renato N. told us this with a burst of hilarity, incredulous of what some people believed at face value. The "*couillions*" ("silly people") Renato was speaking about were not only *contactees* (who tried to pick up his "energy" following the close encounter) and

reporters who came to Trans. Those *couillons* were chiefly the ufologists themselves who, in the attempt at finding ultimate certainties and answers, eventually turned witty remarks in worrying bad faith hints.

The Altered State of Consciousness Hypothesis

In Figuet (1995, p. 15) it is reported that as of 1995 the French researchers *were not acquainted* with the eventual witness use of drugs. At the same time Figuet conjectured about possible secondary effects of some drugs – like the *Cimetidina* [Tagamet] – that could have put the witness into an altered states of consciousness. Such a reference to the hallucinatory properties of Tagamet linked to UFO events was not new. In a GEPAN's *Note Technique* it is possible to find the (witness') suggestion that a drug spurred hallucination could have caused a UFO phenomenon (CNES, 1981).

As a result of our investigation we have discovered that the witness have never been a user neither of *Cimetidina* [Tagamet] nor of *Ranitidina* [Zantac; Ranidil; Ulcex etc.]. He never made use of psychoactive substances. On the contrary we checked the drugs actually used by him upon medical prescription following the 1973 heart attack. Drugs used by Renato N. are *Nifedipina* [Tenordate] and an anhydrous *Teofillina* [Xanthium].

As regards *Nifedipina*, among its secondary effects doesn't appear hallucination or other similar states (this was confirmed to us by several cardiologists). Usually, the secondary effects are temporary, mild and brief, and they are mainly due to its vessel dilator power (Giroud, Mathé, Meynid, 1978). Secondary effect comparisons between *Nifedipina* and other analogous drugs are discussed in Hurst, Schlant (1991).

For what concern *Teofillina*, it is likewise not a source of secondary effects of hallucinatory kind. While at central nervous system level *Teofillina* may cause delirium and sensorial troubles like buzzing in the ears and flashes of light, such displays seldom happen and, moreover, these effects are simple by nature and negligible in comparison with events like headache, nausea, vomiting, insomnia, irritation, or restlessness. The reported effects are usually ascribable either to exceedingly quick venous infusion or to intolerance (Fiorino, Leone, 1998, pp. 133-150).

Evaluation of Hypotheses

In our fallible opinion Renato N. is a reliable witness. Our Trans-en-Provence field investigation didn't give rise to item of proof such as to call in question witness trustworthiness and frankness. He didn't contradict himself in spite of our attempts to pose him leading questions or to focus to marginal issues. While his ironical and humorous temper is as a central psychological issue as it was an unnoticed one, there are not well-grounded suspicions to regard his close encounter as a by-product of his fertile imagination. Those who suggested this hypothesis based themselves on what turned out to be linguistic and psychological misunderstandings.

Secondly, what did come afloat about the drugs used by the witness, do not corroborate the hallucinatory hypothesis.

As regards the "objective" side of this incident, some considerations are deserved. Among suggested hypotheses for identifying the sighted object there is the military helicopter (Maillot, Scornaux, 1997) and the remotely piloted vehicle (Rocher, 1995). The helicopter hypothesis does not stand without adding further hypotheses (hallucination or bad faith). None of these additional hypotheses are corroborated by available facts.

Sturrock (1973) suggested a procedure for evaluating astrophysical hypotheses with the help of Bayes's rule. Extending his analysis to the study of anomalous phenomena,

Sturrock (1994) found that “extraordinary evidence can be built from many (but not very many) items of unspectacular evidence, provided the items are truly independent”. We tested – against the nil hypothesis – two hypotheses for Trans-en-Provence UFO event by means of such a procedure: remotely piloted vehicle (RPV) and aerostatic object (balloon). We have chosen as relevant witness items the following ones: physical appearance, movement shape, speed, sound, sighting site. The presence of trace was not considered among the parameters due to its controversial interpretation and its doubtful link with the UFO sighting. Evaluation of each item’s post probabilities was carried on by a science communication writer specialized in aeronautical matters (Sgarlato, 2000).

While the numerical values of probabilities should not be taken too seriously (as correctly remarked in Sturrock, 1973), the results are unequivocal: if the hypotheses to be considered involve RPV and balloon, we can conclude that, on the ground of the present state of knowledge, those are *bad hypotheses*. None of the two hypotheses indeed fare better than the nil one (both of them give post probabilities based on all items lower than 10^2).

Statistical correlation between trace and ground biochemical properties, while not necessarily linked to the UFO sighting, does represent a still unsolved problem (see Appendix).

In conclusion, even if single witness UFO cases deserve to be considered with caution, the Trans-en-Provence event has to be regarded as a UFO phenomenon in the literal acronym sense: “*Unidentified Flying Object*”.

Appendix: The Bounias Analysis

As a check of biochemical analysis results (Bounias, 1990; 1994) we carried on a linear fit of concentration vs. distance from epicenter data. We estimated both linear fit parameters and parameter errors (standard deviations). Our aim was to try and falsifying the following “nil hypothesis”: it does not exist a linear correlation between concentration measurements and distances from epicenter (or, the two quantities are mutually independent). We also repeated the linear correlation coefficient estimates. Because of greater statistical relevance, we focused only on concentration measurements upon the vegetal samples collected 40 and 730 days after the incident (Fiorino, Leone, 1998, pp. 55-69).

We have found the following results: some biochemical indicators from samples collected 40 days after the incident show a statically meaningful correlation with distance from epicenter. This concerns β Carotene, Chlorophyll A, Chlorophyll A / Pheophytins, Lutein, Proline and Isoleucine; β Carotene is the only substance who keeps showing a correlation with distance in samples collected 730 days later.

We may conclude, with a certain margin of safety, that it does exist a correlation between trace and soil biochemical properties. Of course, the connection between UFO phenomenon and trace is a whole another matter as it rests on witness claims only.

References

- Bosson, Y. and Hertzog M. (1993). Michel: l'intervista. *UFO - Rivista di Informazione Ufologica*, 12, 34-36.
- Bounias, M. (1990). Biochemical Traumatology as a Potent Tool for Identifying Actual Stresses Elicited by Unidentified Sources: Evidence for Plant Metabolic Disorders in Correlation With a UFO Landing. *Journal of Scientific Exploration*, 4, 1, 1-18.
- Bounias, M. (1994). Further Quantification of Distance-Related Effects in the Trans-en-Provence Case. *Journal of UFO Studies*, 5, 109-121.
- Caietti, C. (1981). Ces OVNI qui sillonnent le ciel Varois. *Var Matin République*, 16 Janvier.
- CNES (1981). Enquete 79/05 : A propos d'une rencontre. Note Technique numero 7. Toulouse: Groupe d'Etude des Phénomènes Aérospatiaux Non-identifiés, 22-24 (« Le role eventuel du 'Tagamet' »).
- CNES (1983). Enquete 81/01: Analyse d'une trace. Note Technique numero 16. Toulouse: Groupe d'Etude des Phénomènes Aérospatiaux Non-identifiés, March 1, 1983. CT/GEPAN-00013. ISSN: 0750-6694.
- Durant, R. (1997). Public Opinion Polls and UFOs. In Evans, Stacy (1997), 230-239.
- Evans, H. and Stacy, D. (1997). *UFOs 1947-1997*. London: John Brown Publishing.
- Figuet, M., ed. (1995). *L'affaire de Trans-en-Provence*. Numero Hors Série de *La Ligne Bleue Survolée?* Dompierre-les-Ormes: SERPAN.
- Fiorino, P. and Leone, M. (1998). Rapporto d'indagine relativo al presunto atterraggio di un ovni e relativo ritrovamento di supposta traccia la suolo correlata all'evento. *Unpublished CISU research report*.
- Gendarmerie (1981), Procès verbal de renseignements administratifs, 28/1981.
- Giroud, J.P., Mathé, G. and Meynid, G. (1978). *Farmacologia clinica*. Ed. Esam.
- Guerbois, J. (1981). L'OVNI de Trans: la bonne foi du témoin face à l'incrédulité. *Nice Matin*, 11 Janvier.
- Hurst, W.J. and Schlant, R.C. (1991). *Il cuore. Arterie e vene*. Milano: McGraw-Hill libri Italia.
- Julien, H. (1981). Atterrissage d'un engine non identifié à Trans-en-Provence (Var). *Lumières dans La Nuit*, 207, 11-15.
- Maillot, E. (1995). Compléments d'information sur le cas de Trans-en-Provence. In Figuet (1995), 68-71.
- Maillot, E. and Scornaux, J. (1997). Trans-en-Provence: When Science and Belief Go Hand in Hand. In Evans, Stacy (1997), 151-159.
- Mancusi, B. (1991). Commentaire sur un texte. *Ovni Presence*, 46, 10.
- Monnerie, M. (1984). Hypothèse psychologique. In Figuet (1995), 19.
- Petit, J.-P. (1990). *Enquête sur les OVNI*. Paris: Albin Michel.
- Rocher, T. (1995). L'hypothèse du drone. In Figuet (1995), 93-94.
- Russo, E. (1987). UFO: cosa ne pensano gli italiani. *UFO - Rivista di Informazione Ufologica*, 4, 1-4.
- Sgarlato, N. (2000). Personal communication to the authors, August 8.
- Sturrock, P. (1973). Evaluation of Astrophysical Hypotheses. *The Astrophysical Journal*, 182, 569-580.
- Sturrock, P. (1994). Applied Scientific Inference. *Journal of Scientific Exploration*, 8, 4, 491-508.
- Sturrock, P. (1998). Physical Evidence Related to UFO Reports: The Proceedings of a Workshop Held at the Pocantico Conference Center, Tarrytown, New York, September 29 - October 4, 1997. *Journal of Scientific Exploration*, 12, 2, 179-229.
- Vallée, J. (1990). Return to Trans-en-Provence. *Journal of Scientific Exploration*, 4, 1, 19-25.

Velasco, J.J. (1990). Report on the Analysis of Anomalous Physical Traces: The 1981 Trans-en-Provence UFO Case. *Journal of Scientific Exploration*, 4, 1, 27-48. *Revised translation of CNES (1983).*