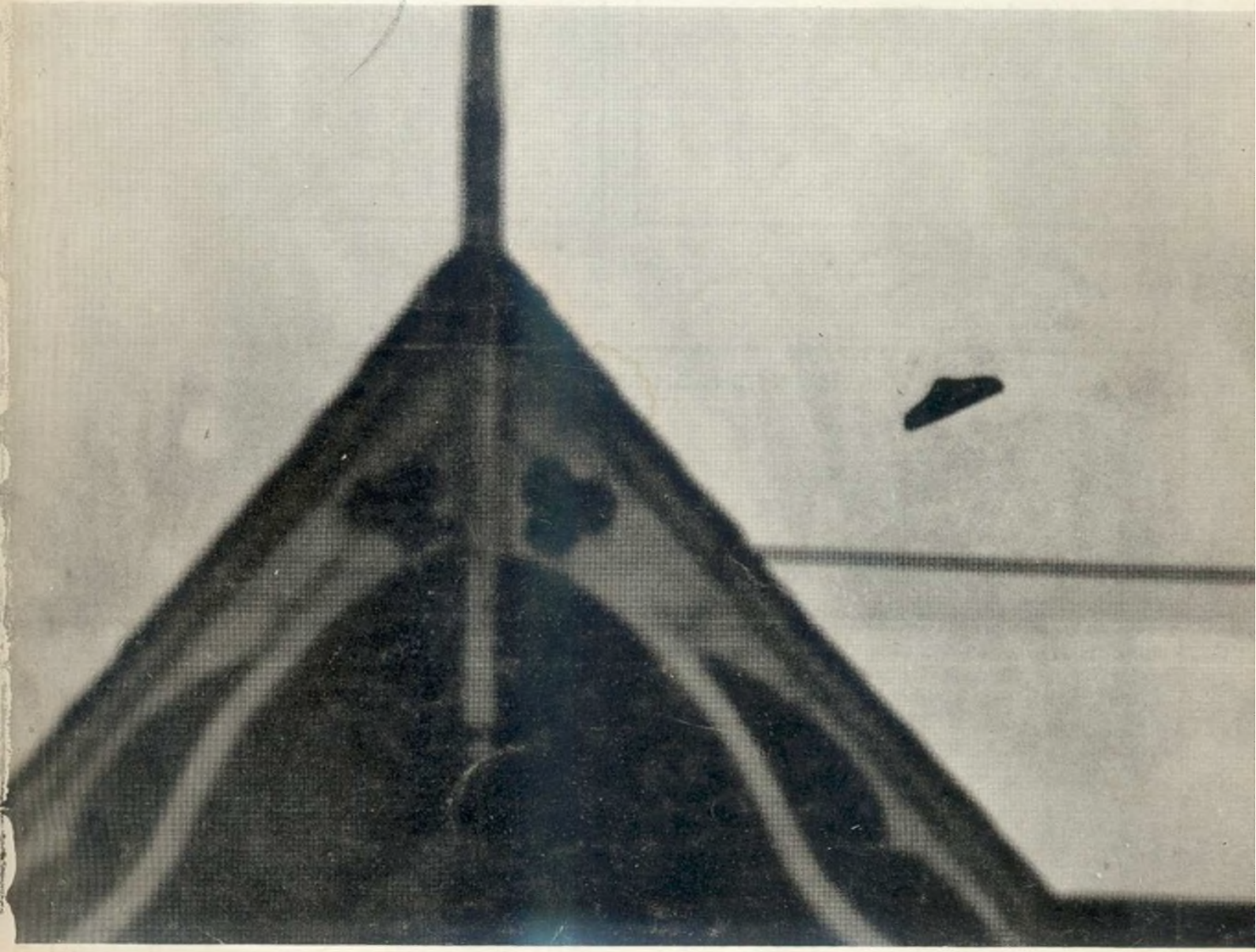
FLYING SAUCER REVIEW

JANUARY - FEBRUARY 1967

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UFO PHOTOGRAPHED OVER LONDON

Editor: Charles Bowen

Assistant Editor: Dan Lloyd

Consultants:
Gordon Creighton, MA, FRGS,
Bernard E. Finch, MRCS, LRCP, D.Ch, FBIS
C. Maxwell Cade, C.Eng, MIEE, MIERE, FRAeS, AInst.P, FRAS
R. H. B. Winder, BSc, C.Eng, AMIMechE

CONTENTS

The Villa Santina Case : Gordon Creighton .. 3
Unusual Photographs from Argentina : Oscar A. Galindez .. 8
Fireballs and Flying Saucers : C. Maxwell Cade .. 10
Design for a Flying Saucer : R. H. B. Winder .. 13
Immense Triangular Object over Majorca 19
Airships over Texas : D. B. Hanlon and Jacques Vallée 20
Evan More Amazing . . . Part IV 25
Mail Bag 27
Book Review 30
World Round-Up 31
Drawings (other than Winder article) by Pauline Bowen.

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Flying Saucer Review,
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Taking Stock

TRADITIONALLY a time for hopeful resolutions, the New Year is, as far as we are concerned, a convenient point at which to review recent events. For those who have striven for a rational study of the UFO problem, ' stocktaking ' on January 1, 1967, must have afforded them a small measure of satisfaction : indeed, the situation would have seemed infinitely more promising than anything that could have been expected on New Year's Day, 1966.

It was to be expected that the first moves would be made in the United States, a bustling, vigorous nation, the richest in the world, and one which boasts an unfettered press. During the first half year, official moves of some significance accorded the subject of UFOs an enhanced respectability. In next to no time there was a deluge of books and magazine articles : old books made welcome re-appearances, while a number of new books—some by genuine researchers—rolled from the presses in their thousands. All were gobbled up by a public which had suddenly become UFO-conscious.

The official moves followed a protracted wave of UFO reports, a wave accompanied by growing disquiet over official Air Force explanations. In the end, public clamour led to the Hearing on UFOs by the Armed Services Committee of the House of Representatives. It was at the hearing that Dr. J. Allen Hynek, the civilian scientific consultant on UFOs to the U.S. Air Force, courageously showed his hand. (Subsequently in published letters and articles, Dr. Hynek, who is Director of Northwestern University's Dearborn Observatory, made quite clear his views on the UFO problem.) The upshot was that the U.S. Air Force launched an Official Investigation by a team of civilian scientists based on Colorado University.

On the surface this is all very encouraging. Nevertheless there is one small worry that needs to be recorded. Has the U.S. Air Force, on finding itself forced into a corner by public pressure and by ridicule of too-facile explanations of UFO reports, undertaken the investigation merely to re-establish its image, and to play for time by side-stepping an awkward situation ? We like to think that this is not the case, but the worry lingers at the back of our minds, thanks to past dealings with officialdom.

So much for the main events on the positive side of the picture. On the negative side, ' explanations ' have become something of a traditional ritual, to be observed when there is any wave of public interest in the subject. Rich in UFO reports, 1966 was also rich in ' explanations '.

The Marsh Gas cases have been discussed in our columns : will-o'-the-wisp may well have been observed and misidentified by some witnesses, just as others may observe fireballs, ball lightning or plasma and imagine they have seen flying saucers. It was something of a surprise, however, to learn that Mr. Anthony Durham of the Cambridge University Group for the Investigation of UFOs feels that the great ' cloud cigars ' of 1952, 1954 and so on, were probably tornadoes. This suggestion was made at the BUFORA Congress held at the historic Cambridge Union on October 22, 1966, when representatives of the press were also present. In support of this contention it was mentioned that the towering columns of tornadoes are internally illumined by lightning, and that plasma is known to fall from them.

An engaging picture springs to mind when we consider this idea in relation to some of the well-known ' cloud cigar ' cases. For instance, in October 1952, Yves Prigent of Oloron College in France, and hundreds of other witnesses, saw some thirty plasma units ' flying ' in pairs beneath a tornado which was floating along in a blue sky. Then there was Captain James Howard, flying a B.O.A.C. air liner over the Atlantic Ocean, who, with the crew and passengers of his aircraft, observed another such tornado. On that occasion, the attendant fireballs chose to re-enter mother tornado in Indian file. When the operation was completed, tornado and embodied fireballs disappeared in the proverbial manner.

While it seems unlikely that researchers of the calibre of Aimé Michel and Jacques Vallée would have overlooked weather reports at the time of the sightings when examining the French cases, it is even less likely that newspapermen would have failed to observe the passage of such destructive storms across the fair land of France during reasonably good weather.

The unusual tornado which struck Stoke Poges and district in Buckinghamshire not so very long ago was only a tiny one, but despite this it was a rumbustious, roaring affair that scythed a path of destruction across the countryside. Yet when we check the reports of the classic ' cloud cigars ', we observe that one of the common features is their *silence.*

From tornadoes let us turn our attention to fireballs. Some of the unattractive properties of this phenomenon were discussed by C. Maxwell Cade in the July/August, 1966 edition of the REVIEW. The phenomenon is the subject of an article by the same author elsewhere in this issue, and the matter also had a widespread airing when Philip Klass, writing in *Aviation Week,* indicated that ball lightning was a valid explanation for many UFO sightings. Not only were most of our detractors with Mr. Klass to a man but also many of them were way out ahead of him, for here was a heaven-sent opportunity to dispense once and for all with this troublesome business of flying saucers. Even some people who claim an abiding interest in the subject have committed themselves to statements that ball lightning is responsible for the bulk of UFO sightings.

If we are to accept such statements without demur, then we must also accept the fact that at least since 1946 the reputedly rare and dangerous plasma phenomena have taken to appearing in shoals, in world-wide waves with peaks of activity that are often coincident with oppositions of the planet Mars. Furthermore, a fair proportion of these fireballs have been seen to land, if we are to attach any credence to the reports by hundreds of reputable people. Again, when the fireballs are seen on the ground, strange creatures of near-human form have often been reported to have emerged from them, and later to re-enter them before the plasmas take off once again.

Remembering all that Maxwell Cade has told us about the lethal incendiary potential of fireballs, we can only assume that the protective clothing which these ' humanoids ' are reported to wear must be exceptionally durable, and must possess remarkable shielding properties.

We hope 1967 will witness fewer hasty conclusions, not only about UFOs or alien aeroforms, but also about meteorological and kindred natural phenomena.

THE HUMANOIDS

Early demand for this Special Issue was so great that we increased our printing order. Copies are therefore still available. **Price 12s. 0d.** post free (USA/Canada **$1.75) Apply to " Flying Saucer Review " Special, 49a King's Grove, Peckham, London, S.E.15, England.**

THE VILLA SANTINA CASE

An important early contact claim

by Gordon Creighton

IF, as seems likely, the alleged encounter of the Brazilian José Higgins with alien entities from a landed machine (on July 23, 1947) is the first known case during the modern phase of the " Flying Saucer Problem ", that is to say since Kenneth Arnold's[1] famous postwar sighting, the one which I present below must surely be the second. Until a brief account appeared in the recent special issue of FLYING SAUCER REVIEW (The Humanoids), it had never been reported in our journal, and I have only vague memories of seeing some slight reference to it in other publications in English. It is of course well known in some European UFO research circles, and I submit it not as any startling new discovery but merely in pursuance of our aim to make the REVIEW as full a record as possible, wherein future researchers, perhaps years from now, may be able to detect vital clues that escape our understanding at present.

Personally, I must confess that I find it very difficult indeed not to take this story seriously, and those to whom I have shown it have been struck by many points that seem to have the authentic ring of truth.

My translation is from the original Italian account, *Ho visto un disco volante,* in CLYPEUS No. 2-5, of May 1964. This journal is the organ of the Centro Studi Clipeologici, Via San Secondo 15 Torino (Turin), whose energetic founder and director is Signor Gianni Settimo. FLYING SAUCER REVIEW is grateful to Signor Settimo and to Professor Johannis for their consent to reproduction of the full story in English.

As readers may know, the Latin word *clipeus* (occasionally *clipeum*) denoted the round bronze shield carried by the Roman soldiers. Certain Roman writers refer to sightings of a *clipeus ardens,* and our friends in Turin are not alone in thinking that some of these things may not have been natural or meteorological phenomena.

The author of the account, Professor Rapuzzi Luigi Johannis, is a well-known Italian painter and writer, who lives in Milan. No attempt has been made to conceal the facts that among Professor Johnannis' numerous writings there are at least fifteen or sixteen books, published mainly in the collection *I Romanzi di Urania,* by Mondadori in Milan, that from their titles are clearly works of Science Fiction, and it seems that the Professor is well known in Italy for his magnificent paintings and in both Italy and other countries of Europe for his Scence Fiction writing.

As always, readers of FLYING SAUCER REVIEW will have to form their own opinions as to whether what follows is the account of a real experience.

I SAW A FLYING SAUCER

(As told by Professor R. L. Johannis)

During the first half of August 1947 I was in a small village called Raveo, near Villa Santina, in Carnia (Friuli).[2] In my boyhood I spent a large part of the summers in that district where I am consequently well known.

I have always been interested in geology and anthropology, and I spent all my leisure time studying these, my favourite sciences, an integral and indispensable part of which involves the systematic search for fossils.

On the morning of August 14, 1947, as usual, I was making my way again up the short valley of the mountain stream called the Chiarsò. This valley ends on the lower slopes of the central mountain massif, the Carnico del Col Gentile. I had with me a small knapsack and my geologist's pick.

I was following a path along the left bank of the stream (which was almost dry) which winds up through clumps of fir trees and deposits of alluvial rubble and detritus. On my right the face of the mountain, with a gradient of about 45°, towered away, consisting of fractured and weathered rock mixed with layers of gypsum.

As I emerged from one of these clumps of fir I noticed, on the rocky river bank, and at a distance of about fifty metres from me, a large lenticular object of a vivid red colour. I am slightly short-sighted, and so I quickly put my glasses on. When I had arrived at a spot a few steps distant from the " thing ", I was able to establish the fact that it was a disc—seemingly of varnished metal like the metal of an ordinary toy—having the shape of a lens and a low central cupola[4] with no apertures.

At its tip a sort of shining metallic antenna, of telescopic form, was protruding, roughly similar to those we have on our present-day motor cars.

(And here I must state straight away that I knew nothing whatever in those days of flying saucers and I do not think that the Italian newspapers had even started to talk about them.)

The object, some ten metres wide, was embedded, to the extent of about a quarter of its length, in a great transverse cleft in the friable rock of the mountain side, and was at a height of about six metres above the bed of the stream.

Without more ado I decided that I would climb up there to it and see what it was, but first of all (and anybody else would have done the same) I looked round to see whether there was anybody about who—should the need arise—could help me.

It was then that I perceived, at a distance of fifty metres or so from me, right on the edge of the grove of trees from which I had just emerged, two " boys ". At any rate, that is what they seemed to be, at first.

I shouted to them and pointed to their disc. And then I started towards them. When I had halved the distance between them and myself, I stopped, petrified.

The two " boys " were dwarfs, the likes of which I had never seen nor even imagined. They were coming towards me slowly, with tiny strides, with their hands at their sides and their heads motionless. When they had come to a few paces from me, they halted. I had no strength left. I seemed to be paralysed,[5] or to be dreaming. But I was still able to observe them in every detail. And those details have remained impressed upon me so indelibly that even now I could make a portrait or even a statue of those extraordinary beings. However I must confess that the dominating sentiment in me then was one of enormous astonishment combined with fear, as you will well understand.

They were no more than 90 centimetres[6] in height, and were wearing dark blue coloured overalls made of some material that I would not know how to describe. " Translucent " is the only term for it. They had collars and rather deep belts, all of a vivid red colour. Even the cuffs and the shins of the legs ended in " collars " of the same type.

Their heads, according to the impression that I got, were bigger than the head of a normal man, and gave them a caricaturish aspect. But I think the sight of their " faces " would have put an end to anybody's desire to laugh.

At this point, I am obliged to explain that the terms I have used in this description are purely indications, and are of a purely anthropomorphic nature, because I don't know, today, whether those things that I have defined as nose, mouth, eyes, and hands were like that or whether it would be more correct to name them in some other way.

They had no signs of hair but in place of it they were wearing a sort of dark brown tight-fitting cap, like an Alpinist's bonnet. The " skin " of their faces was an earthly green[7] (*verde terroso*). The only colour that comes close to it is that of the plasticine commonly used by sculptors or of clay dipped in water. The " nose " was straight, geometrically cut, and very long. Beneath it was a mere slit, shaped like a circumflex accent, which I saw opening and closing again at intervals, very much like the mouth of a fish. The " eyes " were enormous, protruding, and round. Their appearance and colour were like the colour of two well ripened yellow-green plums (*due prugne giallo-verdi ben mature*).

In the centre of the eyes I noticed a kind of vertical " pupil ". I saw no traces of eyebrows or eyelashes, and what I would have called the eyelids consisted of a ring, midway between green and yellow, which surrounded the base of those hemispherical eyes just like the frame of a pair of spectacles.

I remained there in astonishment, for what seemed to me an interminably long time, gazing at the two extraordinary creatures. Only later was I able to calculate roughly how long it was. I think the silent confrontation lasted no more than two or three minutes. Then I raised my arm with the pick and waved it in their direction and then in the direction of the disc, and, in an agitated voice, I shouted and asked who they were, where they came from, and if I could be of any help to them. They wheeled round very quickly and I can't remember what I said after that, for things began to happen fast.

I now believe that the two beings had interpreted my precipitate gestures as being threatening to them. But I don't know for sure, and don't suppose I ever shall. What is certain is that one of them raised his right hand to his belt, and from the centre of the belt there came something that seemed as though it might be a thin puff of smoke. I now think it was a ray[8] or something of the sort. Anyway, before I had time to move of do anything, I found myself laid out full length on the ground. My pick shot out of my hand, as though snatched by an invisible force.

Only once in my life have I had the experience of suffering a violent electric shock. That was in 1924, when I was a student at the Technical Institute in Udine, and the Physics professor made us all form a chain and take the charge from a Leyden jar.

Well, I can only tell you that as soon as I was struck by that smoke-ray, I felt a similar sensation. Moreover I felt myself deprived of all strength and all my efforts to raise myself meant an expenditure of energy that was beyond me.

Meanwhile, the two midgets were coming towards me, and they halted at a spot two metres from me, where my pick had fallen. I managed to roll over on to one side and I saw one of them bend down and pick up the tool, which was longer than he was. And this was how I was able to see his green "hand" quite distinctly. It had eight fingers, four of them opposable to the others! It wasn't a hand: it was a claw, and the fingers were without joints.

I also noticed that the chests of the two beings were quivering; like a dog's chest when it pants after a long run.

I made fantastic efforts to get up, and finally managed a sitting position. But I had to brace my arms against the ground so as not to fall back again.

Meanwhile the two entities had arrived beneath the disc. I saw them climb up, slowly but surely, to the cleft in the rock and disappear into the disc itself, which was imbedded almost vertically in the rock.

A few more minutes elapsed, and then the strange object shot straight out from the rock and rose into the air. A cascade of stones and earth fell down on to the bed of the river. And that was the only noise that broke the silence in that lonely spot. The stream, being at low water, was trickling silently over the pebbles.

The disc remained there stationary in the air, like an enormous suspended gong. I could distinctly see its sharply cut flange four or five metres from me, and for a moment I was seized with terror that it was going to come down and cut me in half like a worm.

I am not sure, but I think I shouted at the top of my voice. At any rate, I am certain that I made every effort to get up and escape. The result was that I kept falling back again, supine and racked with pain.

Meanwhile, the disc had tipped slightly away from its vertical position. Then it suddenly grew smaller,[10] and vanished. Immediately afterwards, I was struck by a tremendous blast of wind (the air shock ?), which rolled me over and over on the ground and filled my eyes with dust. I ended up against the stones in the river-bed and remained there for I don't know how long. Finally I managed to get into a sitting position again and it was then that I looked at my wrist watch. It was 9.14.

But it was only at about midday that I was in a fit state to get back home. In the meantime, I even slept for an hour. My bones all felt as if they were broken and my legs were weak and trembling, as though after a fearful bout of drinking. I looked in my rucksack for my thermos flask of coffee, and was not surprised to find it shattered to pieces, but what did surprise me was not being able to find any trace of its metal casing. Also gone were my aluminium fork and an aluminium can that had contained my cold lunch.[11]

Everything had been soaked with coffee, including a pack of cards with sketches of the region whch I usually carried with me.

I had to be content with bread soaked in coffee and throw away the salami and all the rest.

Finally I should add that I searched in vain for my pick, which would have been very useful to me at that point as a walking stick.

At 2.00 p.m. I reached Raveo and went to bed. I told the proprietress of the inn where I was staying that I had fallen from a rock, and she replied that that served me right for it was high time I stopped going around picking up stones (she has known me for more than 35 years since I was a boy).

Next morning I armed myself with another pick and—I confess—with a revolver, and went back to the spot. Naturally there was nobody there. I climbed right up to the cleft in the rock since I thought the two creatures might have thrown my old pick—to which I was very much attached—in there, but I found nothing.

I believe that that old pick of mine is now in a museum on some other planet. I hope that somebody up there it trying to decypher the marks cut in the handle, my name and a mountaineering motto, and a pair of stylised Alpine flowers, and an eagle. And I hope they rack their brains to a standstill trying to make it out.

Finally I must tell you that at that time I tried to explain my strange adventure in many different ways, but none of them having anything whatever to do with flying saucers or other craft of extra-terrestrial origin. At first I thought the "saucer" was an experimental machine of the Allied Forces which were then in occupation of the Campoformido aerodrome in the Friuli area. My next thought was of some device of Russian origin. Finally, I wondered about some unknown civilisation still hidden away in some unexplored regions of the world like the Matto Grosso of Brazil. The most absurd hypotheses could be adapted to fit my extraordinary adventure. But not one of them was satisfactory, since not one of them could account for the presence of those two little men.

Anybody else in my position would have decided that the only sensible thing to do was to

say absolutely nothing whatever to anybody about what had happened. And this was what I did, quite consciously. I had no wish to be considered a crazy visionary, or worse, and I don't think anyone could blame me.

Two months later, I sailed for New York. During the crossing I heard for the first time about the flying saucers seen by Kenneth Arnold. Only then did I realise that I had seen a flying saucer.

During my five years in the USA I followed with the greatest of interest all developments in the " Flying Saucer Story ", and in 1950 I decided to relate my experience to two persons in whom I have confidence, who can give their testimony about it at any time, and whose addresses I have given to the president of the Centro Studi Clipeologici in Turin which has now been good enough to publish my account.

In 1952, before returning to Italy, I read an article in the weekly review *L'Europeo*, about the book by the American Scully,[12] who spoke of two flying saucers that had landed in America and, as he stated quite clearly, contained the corpses of little men. Then I sent a letter from New York to the director of *L'Europeo*, asking him to publish the account of my experience which, at any rate, possessed the merit of priority in time.

When, two months later, I returned to Italy, I went to Milan, and called upon the director of *L'Europea*. There I was told that the subject was an interesting one but that, in order that it could be published, it was necessary for me to furnish " proofs " (!) of its authenticity.

I replied that if on that morning in August 1947 I had imagined that I was going to encounter creatures from another world, I would certainly not have hesitated for one moment to take along with me a whole troop of journalists cinematographers and (why not ?) a company of soldiers too.

As a result of my experience, I had made enquiries in the village next day (August 15, 1947), as to whether anybody had noticed any sort of " aeroplane " the day before. Two people (an old man and a boy) told me, separately, that they had seen one, in the one case at 8.30 a.m. and in the other case at approximately 10.00 a.m. The old man had been sitting down in the village square enjoying the sunshine. He noticed a red globe being carried aloft by the wind " behind the mountain on the slope of which the village lies. The boy was with his mother and other people, working in a field scarcely outside the village, and he noticed a red ball (" like the ones they have a fairs ") which was rising at great speed and vanished in the clear sky.

That is all that I have been able to gather in the way of " local testimony ". It is doubtful whether it would have been of any interest to the director of *L'Europeo*.

And with that, my story is finished. I will only add that I was deeply disgusted by the mean campaign of vilification which has been carried on in the USA in connection with the matter of the flying saucers and which I followed closely in all its details between October 1947 and 1952. And my disgust ended by turning into bitterness here in Europe when I realised the enormous levity with which the important question of the flying saucers is treated. I say " levity ", because I don't regard as worthy of any sort of consideration at all the hoaxes and the frauds perpetrated for the purpose of making money or for witless propaganda.

And I must conclude this brief account with a warning similar to the one with which the American, Major Donald E. Keyhoe, closes his book *Flying Saucers From Outer Space* [13] : -

> " There are intelligent beings that are coming from Outer Space and have been observing us for years, perhaps for centuries. Perhaps there will be beings similar to us. Others might be very different from us as regards their physical aspect (I am not sure about this).
>
> " We must be ready, at any time, for meetings with these beings, and ready to demonstrate that we are ' civilised '. When ? Perhaps tomorrow or perhaps in two centuries from now. We don't know. But it is certain that, immediately, at the first meeting, we must give them the impression that we are in fact not their enemies. Because, while we can surely learn from them things that will increase our scientific knowledge, we might be treated by them on the same level as inferior beings or savages. And we cannot deny that our own ' highly civilised ' exploratory expeditions in Africa, Australia, Malaysia and Arizona, have answered the poor arrows of the natives with their more lethal leaden bullets. What sort of reply might the ' flying saucer people ' give to our modern weapons ? The mysterious power (magnetic ?) which silently drives their craft should make us think."

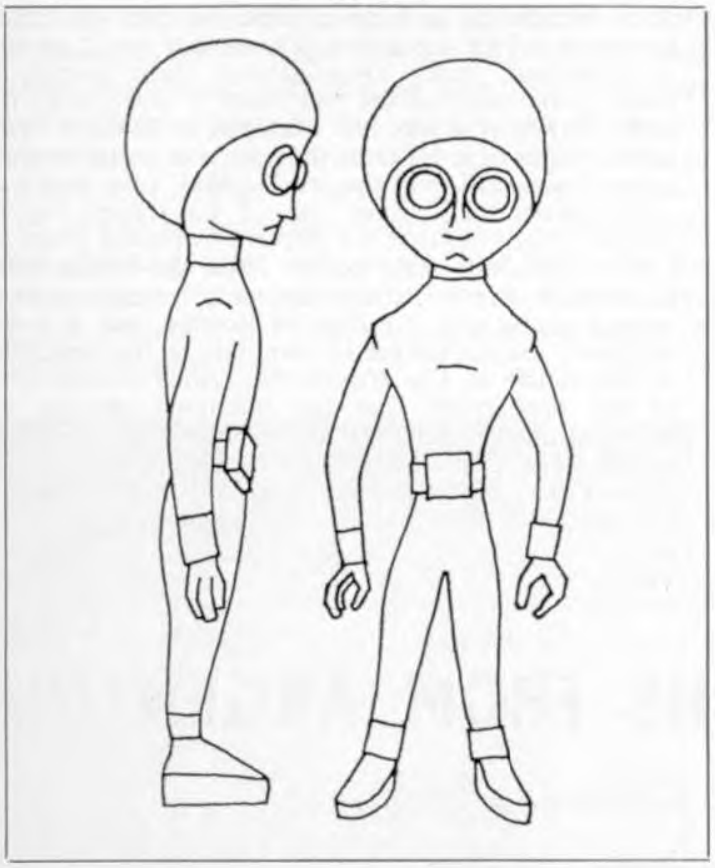
Letter from Professor R. L. Johannis to Gianni Settimo, Director and Founder of the Centri Studi Clipeologici, Turin.

Milan,
March 20, 1964

" My dear Settimo :

In accordance with your request, I am sending you two China-ink sketches to illustrate the account of my meeting with a ' saucer ' and two of its ' pilots ' in Carnia away back in 1947.

As I told you, at such a distance in time, many



of my recollections—exact enough at the time—have weakened and have consequently become a little confused. I refer particularly to the exact appearance of the 'bodies' of the two 'beings' met by me, as well as the shape of the eyes since I am no longer certain whether they were vertical or horizontal slits or whether weren't any pupils at all.

When I sent my account of the episode from America to the Italian weekly *L'Europeo*, I sent with it a sketch of the 'pilots', but when I came back to Europe that sketch was not returned to me because their editorial office had lost it.[14]

That sketch was done by me two months after the meeting, and consequently was much more faithful a reproduction than the ones done by me now.

However, generally speaking, the front view of the 'head' can be taken (apart from the pupils) as corresponding to the absence or not of ears or something similar that I can't recollect absolutely.

The sketches of the complete figures are to be considered as rough and approximate outlines and consequently of purely general value. Besides, I am at present inclined to believe the two pilots were nothing more than two 'robots'[15] whereas in 1947 I was convinced that I had met real and actual extraterrestrial beings.

Please give all these considerations, as contained in the present letters, to the CLYPEUS readers, for I want my account to be taken at its just value and not decked out with suppositions that are purely gratuitous and therefore of no value.

With all best wishes,
Yours,

L. R. Johannis."

Notes by Gordon Creighton

[1] The Higgins case was 29 days after the Arnold Sighting and the Johannis case was 50 days after it.

[2] Friuli is the extreme north-eastern province of Italy, north of Venice and bordering on Austria and Yugoslavia. The mountains are the Venetian Alps and Carnic Alps.

[3] On pages 199-200 of his excellent new book *El Gran Enigma de los Platillos Volantes* (Editorial Pomaire, Barcelona) Antonio Ribera gives a summary of the Johannis case and reproduces the sketches of the entities. But by some curious quirk or error, he translates the Italian word for pick (*piccozza*) as *easel* (*caballete*) in Spanish, and portrays the professor as walking up the mountain side carrying his easel and his paint-brushes (*su caballete y sus pinceles*) and as waving a fistful of paint-brushes at the entities. It seems to me important to have this small point (in what is otherwise a splendid book) rectified, for even to alien entities a pick would presumably seem a more dangerous weapon than a cluster of paint-brushes.

[4] Note the striking resemblances (disc shape, low central cupola, metallic antenna) to the features shown in the seven much disputed photographs of a landed disc—with small entity near it—allegedly taken at 9.30 a.m. on July 31, 1952, by the Italian engineer Gianpetro Monguzzi near the Cherchen glacier on the Italian side of the Bernina Massif, a little to the south of St. Moritz. The Cherchen glacier is not much more than 100 miles from the scene of the Johannis encounter. And both cases occurred after 9.00 a.m.

[5] First Prof. Johnannis feels the "paralysing effect". Later the process is taken further and he is felled to the ground.

[6] See *The Humanoids* Special Issue of F.S.R. There were twelve South American reports in 1965 of little creatures of between 80 cms and 1 metre, and no less than nine came from the *mountainous area of the Andes. The Johnannis and Monguzzi cases were also both in mountains.*

[7] Here are Aimé Michel's "pumpkin-heads", the little men seen at Valensole, "with brains at least three times as big as ours."

[8] Do we have here the creatures that gave rise to the stories about "little green men"? Compare Case 64 of my article in *The Humanoids*, relating how, in October 1965, some Argentine children, on their way to school on the western slopes of the Andes, encountered "several creatures of short stature, greenish skin, and only remotely resembling human beings", who tried to capture them.

[9] "Flashes" or "rays" from the belt or chest are now seen to be frequent features in reports of encounters with small entities.

[10] The disc "grew smaller before it vanished". One feels that there is something of fantastic importance here, a tremendous clue. Captain Howard told me that his gigantic UFO, seen over the Atlantic in 1954, seemed to grow smaller while remaining at the same

distance from the observers. In the Whidby Island case of October 1963 (see FLYING SAUCER REVIEW, November-December 1964, p. 13), the grey ten-foot long craft, shaped more like a wing-aeroplane than a disc, "suddenly shrank considerably in size and tilted so that its rear portion dipped into the ground". Professor Johnannis' disc was also tipped up in a strange way and sticking into the rock. For Heaven's sake, will all our experts on tempic fields and the plurality of dimensions please put their thinking caps on about these cases!

[11] It looks very much as though the entities put Johannis to sleep and then came back and rifled his rucksack robbing him of all metal objects.

[12] Frank Scully: *Behind the Flying Saucers*. (Gollancz, London, 1955. Second British edition).

[13] I have not found these exact words in my English edition of Keyhoe's *Flying Saucers from Outer Space* (Hutchinson, 1954). They may however appear in the Italian translation of that book.

[14] How frequently it happens that sketches and photographs of UFOs are lent and then they just "get lost" or disappear. After investigations these matters for many years one realises that there is much more than mere chance at work. For example, in January 1966 I lent a photo of a UFO to the editor of a British publication known all over the world. After four letters and seven phone calls from me, it has taken him ten months to tell me that the photo *was* posted to me and I must therefore seek redress from the British postal authorities. But he is careful not to comply with my request to be told the date of posting, and it is consequently useless for me to complain to the Post Office.

[15] In his article in *The Humanoids*, Aimé Michel speaks of the probability that the unknown agencies now studying our planet are using, inter alia, *biological robots. And* Coral Lorenzen's fantastic account of the Cisco Grove case, also in *The Humanoids*, contains a description of what may be a **mechanical robot**.

UNUSUAL PHOTOGRAPHS FROM ARGENTINA

by Oscar A. Galindez

Representative of Flying Saucer Review in Argentina

I: A FLYING CONE

AT 4.30 p.m. on July 3, 1960, Captain Hugo Francisco Luis Niotti, a graduate of the National School of Aeronautics at Córdoba, was driving in his car from Yacanto to Córdoba when, at a spot 70 kms from Córdoba, he perceived an object at what he estimated to be about 100 metres from the ground. It was raining at the time—a very fine drizzle. The object was rotating on its axis and travelling slowly southwards. He was astonished by its shape and the total absence of any sound from it. There was nothing to indicate any motor or engine, any smoke or flame.

He got out his 35 mm. camera and took this picture. Despite the fine rain, visibility was good.

After he had watched the object moving slowly and silently along, it suddenly shot straight up vertically and vanished among the clouds.

We consider this piece of documentary evidence of the greatest importance in view of Captain Niotti's standing in the Argentine Air Force and his reputation for probity.

The negative was analysed by Argentine Air Force photographic experts. They reported that they found no signs of trickery or tampering, and concluded: "What the photo shows is a faithful reproduction of what was photographed."

The photo was published, as an exclusive feature, in Number 222 of *La Revista Nacional de Aeronutica*, the official organ of the Argentine Air Force.

II: UFOs SILHOUETTED AGAINST THE MOON

ABOUT a year ago the Reverend Father Segundo Benito Reyna, a Jesuit priest who is the Director of the Adhara Observatory at San Miguel in the Province of Buenos Aires, held a press conference and showed the newsmen a sensational photograph taken with the powerful telescope of that observatory.

Father Reyna, a distinguished scientist who holds the degrees of Doctor of Philosophy and Doctor of Science, has kindly made a print of this photograph available for the FLYING SAUCER REVIEW.

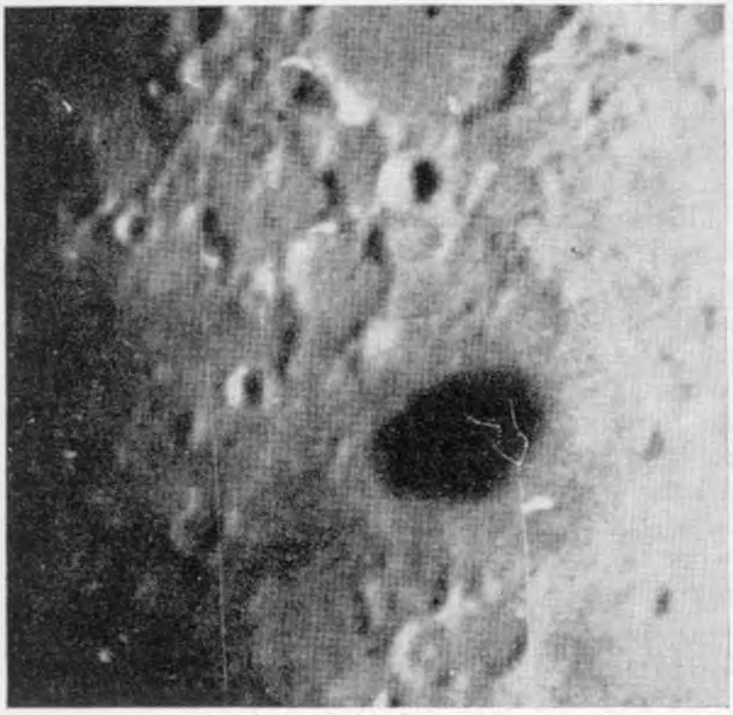
The history of the picture is as follows: At 8.30 p.m. on December 1, 1965, the Observatory began to receive numerous phone calls informing them that there was something strange on the Moon and asking if they could see it.

As it happened, the staff of the Observatory were indeed occupied with the Moon, but they were taking photographs of it at four-minute intervals and were not looking at the Moon itself.

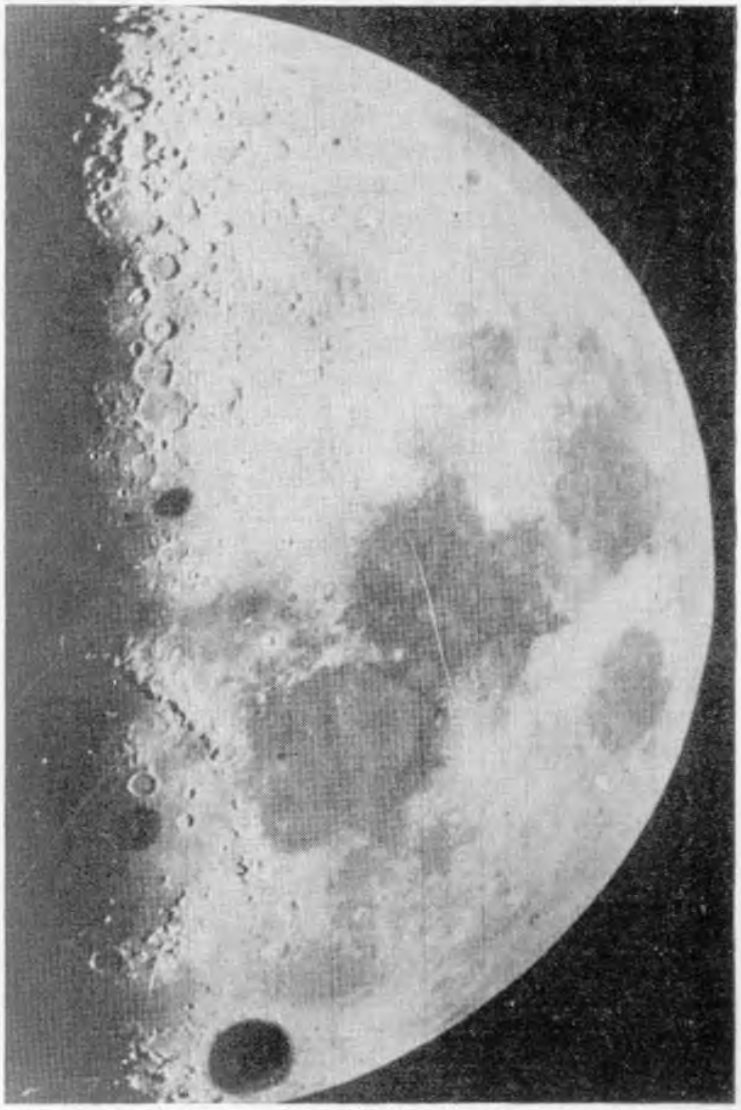
When however they came to develop the pictures, which had been taken with a camera

affixed to the telescope, the sixth of the series was found to show what looked like UFOs, one of them somewhat bell-shaped like the saucer in the well-known photo by the late George Adamski.

There is no question whatever that these objects were either entering or leaving the Earth's atmosphere, as can be seen from their size. Furthermore, a few minutes after the photo had been taken, three strange luminous bodies passed very low over the city of La Plata, to the astonishment of hundreds of witnesses.

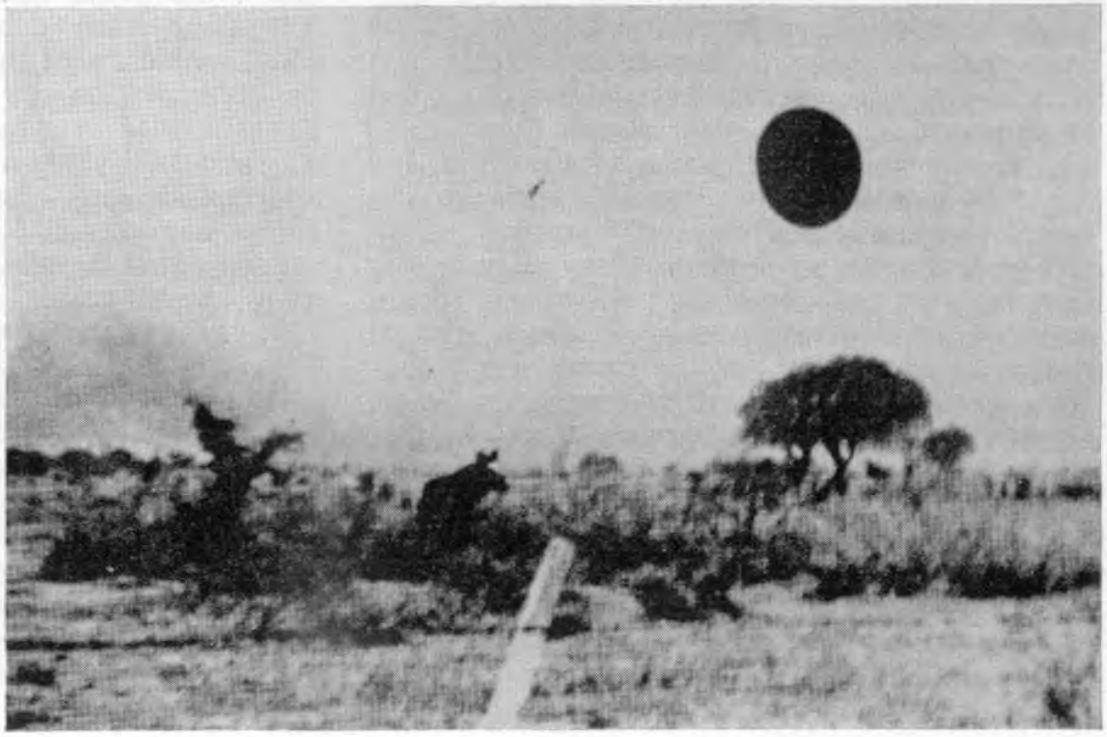


Enlarged detail of " bell-shaped " object.



Frame 6 of the Series of Moon photographs taken at Adhara Observatory on December 1, 1965.

Captain Hugo Niotti's photograph



FIREBALLS AND FLYING SAUCERS

by C. Maxwell Cade

THE great Michael Faraday, to whom we are all indebted for our heat, light, television, and other electrical wonders, once said : " There may be balls of fire but they are not electrical . . ." D. J. Ritchie, one of the most eminent modern authorities on ball lightning wrote, in an article in the *Journal* of the Institution of Electrical Engineers (May, 1963) ; ". . . the origins as well as the existence of ball lightning have, in the past, been extremely controversial, with some authorities insisting that such a phenomenon did not exist." Ball lightning, in fact, has been one of the most-disputed phenomena in the history of science—until it was realised that it made a handy explanation for the even more embarrassing phenomena known as Unidentified Flying Objects.

The well-known science writer, Phillip J. Klass, wrote a perfectly factual account in *Aviation Week* (Vol. 85, No. 8) of sightings which could have been due to ball lightning, and this was seized upon by other writers to create a Nothing-But-Fireballs philosophy which has received an unmerited airing in the national press.

Whilst no wholly satisfactory theory of ball lightning has yet been formulated, the facts are plain enough : lightning balls are electrical phenomena, usually appearing towards the end of severe thunderstorms, spherical or pear-shaped, brilliantly luminous in various colours, varying in size from that of a pea to that of a football, and occasionally to enormous globes of five or six feet in diameter. The balls float slowly through the air, often against the direction of the wind, and they may vanish silently or explode with devastating force, sometimes causing numerous deaths and great damage to property. They often appear from the most unlikely places ; out of shut rooms, ovens, fireplaces, stagnant pools, drainpipes or sewers, as well as among the clouds where they are sometimes encountered by aeroplanes. Sometimes they grow slowly in size, at others they diminish or break up into smaller balls. The following case histories are of sightings which very probably were due to ball lightning.

Case 1. Early in the morning of August 6, 1963, Mr. R. Austin of Fairfield, Illinois, arrived home in an agitated condition after being " chased " by a round ball of bright white light with a fuzzy outline, and which appeared to be about the size of a washtub. Mr. Austin's car was stated to be capable of 120 m.p.h., but he was unable to outdistance the UFO, which at one time assumed an orange tint (the commonest colour for fireballs, C.M.C.). Within a few days of this occurrence numerous other UFOs were reported in the Wayne County area. According to Mr. Austin, the light kept pace with the car, slowing down when he slowed down, accelerating when he accelerated. Eventually the object assumed an orange tint and faded higher into the sky.

Case 2. Hereford *Citizen and Bulletin*, December 6, 1963 : " Wormelow lorry driver Mr. Tom Walker is convinced that he has seen a flying saucer . . . Driving home to Grove Cottage, Wormelow, Tom saw something in the sky . . . he told our reporter : ' It was low down beside me and not far away and it began to follow me all the way up the Callow and home to Wormelow. What made it stranger was the fact that when I reached home it soared up into the sky and disappeared.' "

Although they took place half a world apart, the two preceding cases both occurred in the northern hemisphere. Let us now look at a similar happening from far off Australia :

Case 3. *New Zealand Herald*, May 22, 1963 : ". . . the youth said he saw the object about 9.30 p.m. when driving between Glencoe and Mt. Gambier, near the Victorian border. He said the object was on one side of the road. He thought it was a truck or a bulldozer. Then, when his car was about 20 yards away, a bright light came on and dazzled him. ' I pulled up, the object moved across the road, and I speeded up my car. The light suddenly shot straight up into the air and hovered above the car while I drove underneath. Although I was driving at 50 or 60 miles an hour, the light followed the car. It was as bright as an arc light used in electric welding.' "

The similarities between these cases are really very remarkable. They are so widely separated in time and space as to render the conventional explanation of " hallucinations " just as improbable as the unconventional explanation of " extraterrestrial vehicles ". It may be objected that ball lightning does not follow motor cars like a prowling traffic policeman. But why shouldn't it ? It is known that ferro-magnetic

materials, such as gun barrels, are often very highly magnetised by contact with, or the close proximity of, lightning balls. In a similar way, it has been known for a long time that the ordinary lightning flash often magnetises the metal parts of ships so powerfully as to render the compass useless. Is it not possible that a motor car which approaches or is approached by a lightning ball in relatively open country with an absence of other vehicles, should exercise a magnetic influence over the ball ? In which case, we have been looking at the phenomenon back-to-front. It is not the lightning ball which is pursuing the motor car, but the motor car which is dragging the lightning ball along with it.

Case 4. In the *Worcester Evening News* of July 27, 1963, we read how a brilliant white ball of fire which turned orange was reported as having been seen over Malvern twice in one night. Mr. Lloyd and his wife, of St. Andrew's Road, Malvern, had retired for the night when a brilliant white light illuminated their bedroom through the drawn curtains. The source of the light was a large ball-shaped object in the Old Hills direction. It moved towards Malvern, disappearing in a south-easterly direction. While it moved it emitted a brilliant pulsating while light, which turned orange just before the object vanished. Mr. Lloyd stated that he saw the object again, forty-five minutes later. Both times, the object did not disappear instantly but gradually diminished " as though the object were climbing at speed at an angle of about 45 degrees." The same effect would, of course, occur if the light simply diminished while remaining stationary. After the disappearance, according to Mr. Lloyd, there was a noise for a few seconds " as of powerful jets "—similar noises have been reported in connection with many unquestionable lightning balls.

These cases show, I think, that a proportion of UFOs can be explained as ball lightning at least as well as they can be explained away as anything else. But before passing on to totally different phenomena, I shall mention a class of fireballs which is undoubtedly responsible for many UFO sightings, but which is definitely not ball lightning.

There is a class of unusual meteors caused by fragments of comets (cometoids), in other words, by lumps of frozen water and gases. The Slow Moving Green Fireballs, as they have come to be known, show some indication of annual or semi-annual periodicity in occurrence, but have a large sporadic occurrence as well. Sometimes the green ball has a red halo, or a faint red wake. They have been observed not only to wobble, but to change their flight path, and their trajectories when below a few thousand feet are nearly horizontal. The most careful examination of areas where flights seem to have ended has never discovered debris of any kind, but falling droplets have been seen after the passage of some of these fireballs. Laboratory experiments have shown that frozen metastable nitrogen undergoes a transition at 16 degrees Absolute which produces a strong blue-green radiation, and this is thought to be responsible for the characteristic luminence of the Slow Moving Green Fireballs.

Case 5. On July 19, 1956, a number of strange objects passed through the skies of Kansas and were witnessed by several observers. That same day, the San Diego *Evening Tribune* reported : " The Kansas State Highway Patrol today said ' a ball of fire travelling east at a high rate of speed had been picked up by radar at the Hutchinson (Kan.) Naval Air Station.' City Editor Brian Coyne, of the Arkansas City *DailyTraveler* said ' a brilliantly-lighted, tear-shaped object with prongs or streams of light spraying downward was sighted shortly after midnight. A second object was sighted around 1 a.m.' He also described the head of the object as being green in colour or bluish-green." This is typical of a cometoid sighting, and in general such objects are both more common and more spaceship-like than lightning balls.

Let us now turn to a sort of transition-sighting, one which bears certain resemblances to fireballs, whilst having a distinct suggestion of the spaceship about it.

Case 6. On November 17, 1882, Bishop Michaud made the following observation : " I was standing on the corner of Church and College Streets . . . when, without the slightest indictation or warning, we were startled by what sounded like a most unusual and terrific explosion, evidently very nearby. Raising my eyes, and looking eastward along College Street, I observed a torpedo-shaped body, some 300 feet away, stationary in appearance, and suspended in the air, about 50 feet above the tops of the building. In size it was about 6 feet by 8 inches in diameter, the shell or covering, having a dark appearance, with here and there tongues of fire issuing from spots on the surface resembling red-hot unburnished copper. Although stationary when first noticed, this object soon began to move rather slowly and disappeared over Dolan Brothers' store, southward. As it moved, the covering seemed rupturing in places, and through these the intensely red flames issued." Charles Fort (probably with his tongue in his cheek) concluded, from the many different accounts of this well-attested event, that ; ". . . upon November 17, 1882, a vast dirigible crossed England . . ."

And now we can complete the transition by considering a case which by no stretch of the imagination can be explained away as a slow moving green fireball, and is even less like ball-lightning.

Case 7. On the morning of December 20, 1895, a strange appearance in the sky was observed from Virginia, North Carolina and South Carolina. A brilliantly white luminous body passed overhead from west to east, until at about 15 degrees above the eastern horizon it seemed to stand still in the skies for about fifteen minutes or more. Some descriptions referred to " an enormous wheel " ; according to others, whatever it was, appeared to be the size of a table. The noise of its passage through the air was reported to be heard, and eventually it just disappeared without any audible or visible explosion.

This last case is as unlike the familiar flying saucer reports as it is unlike ball lightning or green fireballs, and it may be some entirely new phenomenon. This is the important thing to note. It is quite certain that many UFOs are lenticular clouds, others are motor car headlights, Will-o-the-Wisp, Venus, Jupiter, slow moving green fireballs, or ball lightning. This does NOT, however, mean that all sightings can be reduced to this, or any other circumscribed list of standard ' explanations . It is even more fatuous to attempt to reduce the extraordinary variety of appearances, conveniently lumped together under the heading of UFOs, to any one of these categories.

Almost all scientists now admit the overwhelming probability that life of some kind is widely distributed throughout the entire Universe, and although it is only about ten years since space flight was described as " utter bilge ", it is also widely admitted that manned spacecraft will explore the solar system, and unmanned probes reach for the nearer stars, within the next twenty years. In these circumstances, it is far more " unscientific " to try to dismiss all unexplained aerial appearances as familiar phenomena than it is to hold the open minded view that some of them may be the artefacts of extraterrestrial communities.

CONGRATULATIONS

Our readers will be pleased to learn that our valued friend and contributor, Jacques Vallée, has successfully concluded his latest university course, and has been awarded his Ph.D. in Computing Science.

Dr. Vallée has now taken a post at an important computing centre in Chicago.

PIECE FOR A JIG-SAW

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3rd June. Brinsley Le Poer Trench :
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For details of THE BRITISH UNIDENTIFIED FLYING OBJECT RESEARCH ASSOCIATION, BUFORA JOURNAL and London Lectures, send a 9" × 4", S.A.E. to :—Lionel Beer (FSR), Flat 15, Freshwater Court, London, W.1.

DESIGN FOR A FLYING SAUCER

by R. H. B. Winder, B.Sc., C.Eng., A.M.I.Mech.E.

PART II — Construction and Performance

THE first article in this series dealt with the basic principles governing the preparation and properties of a plasma of ionised gas, and showed how it can be compressed and ducted by a magnetic field in order to make a propulsive jet. A thermonuclear reactor capable of providing both the electrical power and the ionising radiations needed by such a system was also discussed.

Now it is appropriate to proceed to the practical application of this fusion powered hydromagnetic system. Our ultimate intention is to examine the feasibility of crossing interstellar space in order to carry out sustained operations in the vicinity of a planet with an atmosphere and, of course, to return. That examination, however, is a long-term task for amateurs without access to extensive research facilities, so we shall limit our present attention to the problems of operation in the planetary atmosphere.

The exercise then becomes one of aircraft design but with profound spacecraft implications, because our aircraft has to get across space—either of its own volition or in a carrier. It then becomes subject to all the rigorous conditions that nature imposes on the design of spacecraft, in addition to those that normally govern the design of aircraft.

The most rigorous condition of all is the imperative need to maximise power and to minimise weight for, no matter what systems are invented or discovered, the craft with the longest range and endurance will always be the one having the highest ratio of power to weight.

The system proposed here is based on established knowledge and runs parallel with current trends in aerospace development. It has survived several others that had to be rejected on various grounds. Many approximations have been made in its design, again owing to the lack of time and facility for detailed analysis, but there has been no conscious departure from conservatism : the outcome seems feasible and the conclusions valid. One of the objects of this publication is to invite professional comment (which should be addressed to the Editor).

A curious feature of the whole exercise has been the exceptional ease with which the various findings have dropped into place in a self-consistent and logical structure. This is unusual in a field which is notorious for its hidden pitfalls and its extremes of compromise normally resulting in devices which succeed, as it were, by the skin of their teeth. The present machine seems, in contrast, to have a great deal in reserve and to be capable of much higher performance than has been considered here. There is a strange implication that the proposal is not unprecedented and that it has all been done already. Serious students of flying saucer reports may well form the same impression when they examine its characteristics, which will be discussed in detail in the latter articles of the series.

We are not aware of any terrestrial precedent. Although the current literature contains several studies of fusion powered hydromagnetic spacecraft, there seems to be no hint of an aircraft based on similar principles. This may be due to security since it is highly unlikely that the possibility has never been examined, or it may simply be due to our incompetence in searching the literature ; but there is a remote chance that some aspect of the proposal is novel in a legal sense. However, rather than claim any invention, we would prefer to invite collaboration in working out all the possibilites that remain to be explored, for there seem here to be distinct indications that flying saucers are not only technically feasible but are also mathematically predictable in many respects.

Propellant

The successful development of thermonuclear reactors will solve part of the power-weight problem. They are generally expected to make interstellar flight feasible. The helium-deuterium reaction is particularly attractive because it demands comparatively little shielding and produces its power in forms suitable for hydromagnetic propulsion.

The major outstanding problem will then be the provision of material to be expelled in the propulsive jet. No power in the world can create a jet out of nothing, but until the burden of propellant carried by spacecraft can be drastically reduced, manned interstellar exploration will remain impossible. The biggest step in the right direction would seem to be the one towards the use of natural propellant.

Aircraft already do this. They are surrounded by an abundant supply of natural propellant and modern jet engines are specifically designed to make use of it. Unfortunately, as they gain altitude, the supply diminishes and they lose performance. Aircraft cannot for this reason become spacecraft, nor can spacecraft draw propellant from their surroundings, but they could at least be designed to use any that is readily available at their destination, rather than attempt to carry all they need for the return journey from their home base.

These are the considerations that will govern the design of our special aircraft. Unless the tenuous atmospheres of space turn out to be many orders of magnitude denser than they seem to be, it is most unlikely that it can also be a spacecraft, so it will require a space carrier. But it must not be a burden

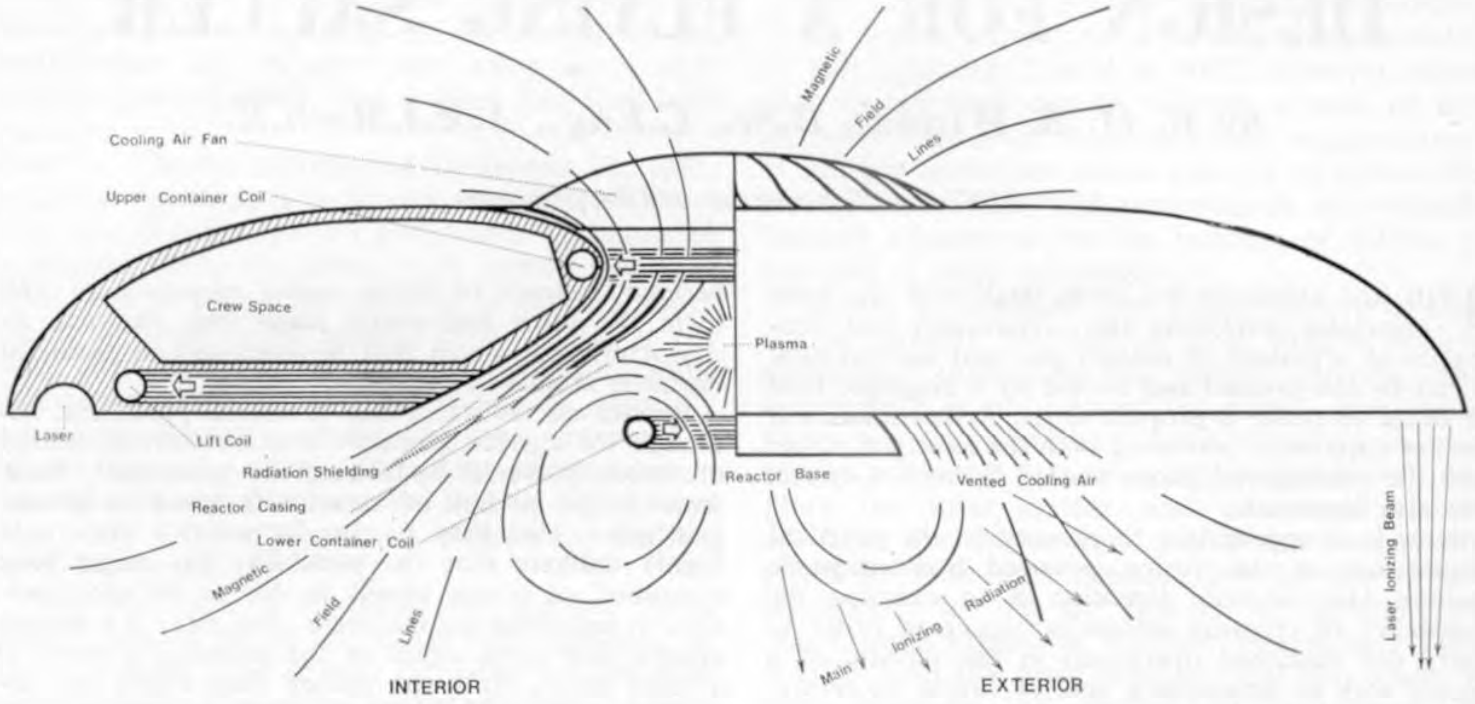


Figure 2. 1. **Proposed fusion powered hydromagnetic aircraft.**

to the carrier and will probably be required to contribute to its propulsion. At the outward end of the journey it may also have to go in search of propellant for the carrier's return and must, itself, be capable of using natural propellant.

It should now be clear why the problem is not just a matter of designing something like a lightweight helicopter for ferrying a spacecraft's crew during their investigations. We need a powerful versatile workhorse, independent of home supplies of propellant and economical in its fuel consumption. Fusion reactors offer fuel economy at high power, and hydromagnetic propulsion offers the versatility. What seems to be the best combination of the two looks very much like a flying saucer. We shall now consider it in detail.

Figure 2. 1 illustrates the proposed design. It is exceptionally powerful because it is intended to contribute to the propulsion of its space carrier. It has also to be capable of seeking and transporting heavy supplies of propellant to the carrier for the return journey. Its outstanding feature is its hydromagnetic propulsion system, based on a strong and extensive pulsating magnetic field.

Lift Coil

This is the coil that compresses and ejects ionised air from the region beneath the machine in order to generate a propulsive jet. The way in which a pulsed magnetic field can do this was discussed in the first article of this series ; the method of ionising the air will be dealt with later.

We arbitrarily assign a diameter of 100 ft. to the coil and, less arbitrarily, a central field strength of 100 k Gauss, pulsing to 200 k Gauss. The strengths chosen are a rough compromise between various conflicting factors, notably the need to provide high values for applying adequate forces to ionised air whilst remaining within the foreseeable capacity of superconductors.

The corresponding electrical currents in the coil will be 250 and 500 million Amperes respectively. If the coil were to be made from the Niobium Tin compound mentioned before, it would weigh about 250 tons. The immense bursting forces applied to the coil by its field, coupled with the reaction from the propulsive jet, will demand an extremely strong supporting structure weighing, perhaps, another 250 tons. It is indeed probable that the whole aircraft structure will be largely determined by the demands of coil support. It would seem reasonable to allow about 1000 tons for the total all-up weight.

In order to produce the greatest possible extension of the lift field, the coil must have the maximum diameter permitted by the geometry of the aircraft. On the other hand, the area presented at right-angles to the direction of motion must be minimised in order to avoid excessive drag. These considerations, coupled with the need for a strong structure, indicate a circular construction with the lift coil around its periphery. In certain circumstances it might prove desirable to locate the coil outside the main body, in a kind of equatorial ring, but in the present design, as shown in Figure 2.1, the coil is placed just inside the rim of a disc-like craft.

Reactor

In order to produce a symmetrical zone of ionising radiation beneath the craft, the reactor must be located on the axis of the machine, preferably with its base protruding slightly. It requires full peripheral shielding for protection of craft and crew, together

with moderate top-shielding to reduce unwanted ionisation ahead of the machine. The base is largely unshielded in order to facilitate ionisation of the air beneath, but might require some adjustable shielding for regulating the intensity of its radiant output.

The interception of neutron and gamma radiation by the shields will raise their temperature, so a continuous flow of cooling air has to be provided for them. This air will be strongly ionised in its passage over reactor and shielding and will be unable to cross magnetic lines of force. The air ducts will, therefore, have to be aligned with the local magnetic field. Ionisation beneath the machine would be improved be exhausting the cooling air in the region. Indeed, it is possible that the cooling air could be persuaded to surround less ionised air and function as a means for transferring magnetic forces to it. The cooling air will, of course, be driven by a low-pressure fan.

Thermal shielding for the reactor is a comparatively easy problem to solve. Materials are available which are capable of reflecting almost all the thermal radiation they receive. The reflected heat will be partly returned to the reactor. In order to maintain its operating temperature, the remainder is rejected beneath the machine.

A thermonuclear plasma is particularly susceptible to contamination, and may also demand a very low starting pressure in order to avoid excessive build-up of pressure during the reaction. It is therefore essential to provide a material container in addition to the special containing field. The size of vessel has of course to allow adequate clearance between its walls and the plasma, and its walls must be protected by thermal shielding.

The arrangement of reactor vessel, cooling flow and shielding shown in Figure 2. 1 takes account of all these considerations, and is based on the assumption of a cusp-shaped containing field.

Magnetic Container

The cusped field was discussed in the preceding article. It is generated by coils placed in opposition. Our problem is to " marry " the container field with the much more extensive lift field without producing excessive distortion. The solution is facilitated by the tendency for opposed coils to cancel each other's distant magnetic effects.

The arrangement adopted is shown in Figure 2. 1. The lower container coil, which is also the smallest, is placed close to the centre of the lift coil and its electrical connections are so arranged that its current circulates in the opposite sense to the lift current. The upper container coil is made somewhat larger and is located centrally near the top of the machine. It co-operates with the lift coil.

The arrangement has several advantages. When the currents in all three coils are properly adjusted, the magnetic field takes the form shown by the lines of force in Figure 2.1. It amounts to a local cusped field somewhat distorted by the lift field or an extensive lift field only locally distorted by the cusp. It will be noted that the field in the vicinity of the reactor provides a suitable path for the cooling air over the shields and into the space beneath the machine. A secondary, weaker, cusp is produced below the machine which may prove useful in maintaining a " reservoir " of strong ionisation in that zone.

It will also be noted that the co-operation between the upper and lift coils tend to diminish the field between them. This always happens between conductors carrying currents in the same direction and, in this case, is useful for avoiding over-strong fields in the crew spaces of the machine. It is also possible to " tailor " the upper surfaces of the machine to the same shape as the field in their vicinity. The shape is then reasonably aerodynamic at hypersonic velocity, but the main advantage of a field parallel to the leading surfaces lies in its capacity for reducing heat transfer to those surfaces from the high-temperature air produced by speed : thermal conduction across a field is diminished in the same way that particle motion is restricted. The shock wave produced at speed tends also to be held further away from the machine's surfaces.

A useful additional benefit conferred by the container coils arises from a " buffering " action that they are capable of generating in the event of two machines approaching too closely to one another. As will be explained later, machines could generate strong attractions in axial approach which could be disastrous. The approach of the upper container coil of one machine to the lower container coil of another above it would, however, produce strong repulsion, within a certain zone, which could well serve to avoid danger.

Operation

The circulation of electric currents in the three coils has already been explained. Different values are required in each coil in order to produce the desired shape of field but, as is well known, the total current in any coil may be adjusted simply by giving it the appropriate number of turns. It is not difficult, therefore, to arrange for the same current to flow in each conductor of each coil. They may then be connected together, in series, so that a change in one affects the others.

This is in fact done in the present design, so that when the plasma in the reactor fuses and thrusts its energetic products against the cusped containing field and pushes its lines of force back against the container coils to generate increased current in them, the increase is immediately transmitted to the lift coil and causes it to pulse and intensify its field. Ionised air beneath the machine is thus compressed and expelled to form a propulsive jet. The exhausted plasma then cools and allows the whole system to relax to its original state in readiness for the next pulse. Meanwhile, fresh neutral air, which has no difficulty in crossing a magnetic field, takes the place of the expelled air in readiness for ionisation in its turn.

One way of looking at this important impulsive action, which is central to the whole design, is to look upon the coils and their fields as nothing more than a mechanical link transmitting the force of the expanding plasma direct to the propellant air. An-

other way is to look upon the reactor as an electric generator driving the lift coil as an electric motor. All these explanations are legitimate and do not infringe any physical laws. The overall efficiency can be calculated, taking account of slip between the fields and the ions both in the plasma and beneath the craft, but it is a demanding task that we shall not attempt here. In view of the complete absence of loss in the totally superconducting electrical circuit, it is conceivable that efficiency, if calculated, would turn out to be high.

Before proceeding to an estimate of the propulsive performance of the system, it is necessary to mention the way in which ionising radiations are produced by the reactor during the power pulse :

The temperature of the plasma during the reaction may be expected to rise to well over a thousand million degrees. Under these conditions its particles are in incredibly violent motion, which of course is necessary for them to collide heavily enough to fuse. There will also be many near-collisions, resulting in very sudden changes of direction of the particles involved. Each change is an acceleration which, in accordance with the basic principles we discussed at the outset, generates a pulse of radiation. This kind of radiation is known as BREMSSTRAHLUNG which, in a literal translation from the German, means braking radiation. It always has higher frequencies than the gyratron radiation also produced by the reactor.

According to GLASSTONE and LOVBERG (2.1), bremsstrahlung from a thermonuclear reaction may be expected to consist largely of " soft " x- radiation, apart from a small content of gamma rays and some ultra-violet. The proportion of total power radiated as bremsstrahlung can be adjusted by adding controlled amounts of elements, with higher atomic numbers than the fuel, to the plasma. These produce an increase in the radiative output compared with the pressure pulse power. Now it so happens that soft x-rays are readily absorbed by air and have adequate energy for exciting its electrons to ionisation levels. We thus have a power source capable, not only of generating the electric power required by the lift coil, but also of providing the ionisation needed for its action, both at precisely the same time. The gyratron radiation also produced by the reactor is of too low a frequency to promote ionisation.

Jet

The volume of air influenced by the magnetic field will depend upon the extent of its ionisation and, as will be seen in a later article dealing with the penetration of the ionising radiation, this can be fairly sharply defined. In order to simplify calculation, we shall assume that the affected air occupies an imaginary cylinder immediately beneath the machine.

The forcefulness of the field's action depends of course upon its strength and the degree of ionisation in the air, and is accordingly a little difficult to estimate. Force tends to be wasted by " slip " between the field and the un-ionised part of the air. Although it is reasonably certain that the ionised particles will readily transfer momentum to their neutral neighbours, we shall allow for a substantial excess of force by choosing a strength of field sufficient to generate a compression of at least 1lb./in.^{2}.

From equation 1.6, in Part 1, it can be shown that a change of field strength from 800 to 1600 Gauss is sufficient to produce 1lb./in.^{2}. Equations 1.2 and 1.3 show that such strengths (and greater) can be found almost everywhere inside an imaginary cylinder 500 ft. in diameter and 250 ft. deep immediately beneath the craft. The cylinder would contain 1800 tons of air at normal atmospheric pressure. We now have to determine how often and how fast it must be expelled in order to drive the machine.

The well-known law of jet propulsion states that thrust is equivalent to rate of change of momentum. In the case of a pulsed jet, this can be expressed by the equation :

$$T = WVP/g \qquad (2.\ 1)$$

where T = thrust in tons
W = weight of expelled air in tons
V = expulsion velocity in ft./sec.
g = gravitational acceleration = 32 ft./sec.^{2}
P = pulse frequency in cycles/sec.

The expulsion velocity has to be high enough to get the air out of the cylinder in the time allowed by the pulse. We shall assume that it all has to leave through the bottom of the imaginary cylinder in half a pulse, leaving the other half pulse for recovery of the system. If the air is accelerating uniformly and the cylinder is L ft. deep, this means that its average velocity must be 2LP ft./sec. and its departure velocity twice as much. Hence :

$$V = 4LP \qquad (2.2)$$

where L = depth of cylinder of air in ft.

Combining these two equations gives the following expression for pulse rate :

$$P = \tfrac{1}{2}\ (Tg/WL)^{\frac{1}{2}} \qquad (2.3)$$

Hover

The pulse rate necessary to keep the machine in hover can now be calculated from equation 2.3, by putting the required thrust equal to the machine's weight and inserting the other dimensions already discussed, i.e.

T = 1000 tons
g = 32 ft./sec.^{2}
W = 1800 tons of air
L = 250 ft.

Then $P = \frac{1}{2}\,(1000 \times 32/1800 \times 250)^{\frac{1}{2}}$
$= 0.13$ pulses/sec.

This result may surprise many. It means that the 1000 ton machine need only pulse once every 7½ seconds to remain in the air.

The air velocity may be equally surprising. It is (from equation 2.2) :

$$V = 4 \times 250 \times 0.13$$
$$= 130 \text{ ft./sec. (about 90 miles/hr.)}$$

It means that the movement of air would be noiseless.

The pressure required to produce this velocity would be about 0.15 lb./in.^{2}, which is well within the 1 lb./in.^{2} the field is capable of producing inside the chosen size of cylinder.

Acceleration

The same equations may be used to predict pulse rate and air velocity for acceleration, but we have first to allow for the obvious increase in pressure involved. Let us conservatively assume that the pressure capacity of the field has to be 500 times the 0.15 lb./in.^{2} needed for hover. In order to generate a compression of 75 lb./ in^2 the field has to pulse from 7000 to 14000 Gauss. Strengths of this magnitude can be found anywhere in an imaginary cylinder 200 ft. in diameter and 120 ft. deep. That cylinder would contain about 135 tons of air.

Suppose we want a high acceleration, thirty times the acceleration due to gravity—the reason for this high value will become apparent later—which needs a thrust of 30,000 tons. The equations then give a corresponding pulse rate of 1.4 per second and an expulsion velocity of 680 ft./sec.

These values, like the hover values, are surprisingly low. The explanation lies of course in the extraordinary size of the jet which is many times greater than the size of the machine producing it. The capacity of the magnetic field to generate big jets without any weight penalty, because the magnetic nozzle is weightless, is the outstanding advantage of hydromagnetic propulsion that no other foreseeable system could hope to emulate. The field also, of course serves to transmit the force from the jet to the machine.

It is interesting, even if it is a little premature, to speculate that the invisibility of the magnetic nozzle could be one of the reasons behind the alleged impossibility of flying saucers. In terms of conventional jets, which are invariably ducted *through* the aeroplane, they are undoubtedly impossible ; but it should now be clear that witnesses could simply be describing an object that is really the comparatively small hub of an enormous invisible jet engine, perfectly capable of generating high thrust with little or no sound.

We may now proceed to calculate the power of such an engine.

Power

Jet power is readily calculated from the kinetic energy of the air expelled in each pulse, which is given by :

$$E = 2240 \ WV^2/2g \qquad (2.4)$$

where E = jet energy in ft. lb./pulse.

In hover, E amounts to about 10^9 ft. lb./pulse ; and in 30 g acceleration it is twice as much.

Multiplication by pulse rate gives the jet power : in hover it is 140×10^6 ft. lb./sec., equivalent to 260 thousand horsepower, or 200 mega Watts (MW). The corresponding values in acceleration are 3000×10^6 ft. lb./sec., 5.6 million h.p. and 4200 MW.

The power consumed in ionising the propellant air is also readily calculated if the required degree of ionisation is known. We shall assume that it is necessary to create 10^{16} ion pairs out of the 10^{19} neutral particles available in each cubic centimetre at low altitudes. That intensity is about ten times the degree of ionisation used in experimental magnetohydrodynamic generators. We shall also assume that each ion pair persists, despite recombination, long enough for the magnetic pulse to act upon the ions. Although recombination takes place at a high rate at normal pressure, the radiative energy released thereby will assist in maintaining ionisation.

It is known that the creation of one ion pair in air consumes 32.5 electron Volts of energy. The ionisation of the 1800 tons of air expelled in each pulse during hover will therefore require 4.5×10^{29} eV/ pulse which is equivalent to an average power consumption of 10000 MW. The corresponding values at 30 g acceleration are 3.5×10^{28} eV/pulse and 8000 MW. The reduction in ionisation power from hover to acceleration is attributed to diminution in air flow. Nevertheless ionisation power remains considerably higher than jet power, a situation that can only be justified by the high-performance obtainable from hydromagnetic propulsion and by its space potential.

Bearing in mind that recombination ultimately converts ionisation power into heat and radiation, it is interesting to calculate the temperature rise that would occur if it all turned up as heat in the propellant air : 8000 MW applied to the 135 tons of air expelled 1.4 times/sec. would raise its temperature not more than 100° F. This is negligible compared with the thousands of degrees that would be involved if heat were employed as the ionising agent, and confirms that " cold " ionising radiations are to be preferred.

Returning to the question of power, the totals amount to 10200 MW in hover, and 12200 MW in full acceleration. These are high values, as are to be expected from a heavy, vigorous flying machine ; and, of course, they are inflated by the ionisation demand ; but they are not beyond the predictable capacity of a fusion reactor.

According to GLASSTONE and LOVBERG (2.1) a conservative power density for such a reactor would be 100 Watts/cc. LINLOR and CLAUSER (2.2) in their proposal for a fusion plasma propulsion system, cite a much more optimistic 30 kilo Watts/cc. We shall remain conservative, which means that our plasma volume will have to be 122 cubic metres at full power. This can be accommodated in the equivalent of a spherical volume about 30 ft. in diameter which can be fitted into the aircraft without undue difficulty. Fuel consumption at full power would amount to 140 lb./day on the basis of HILTON's estimate (1.2).

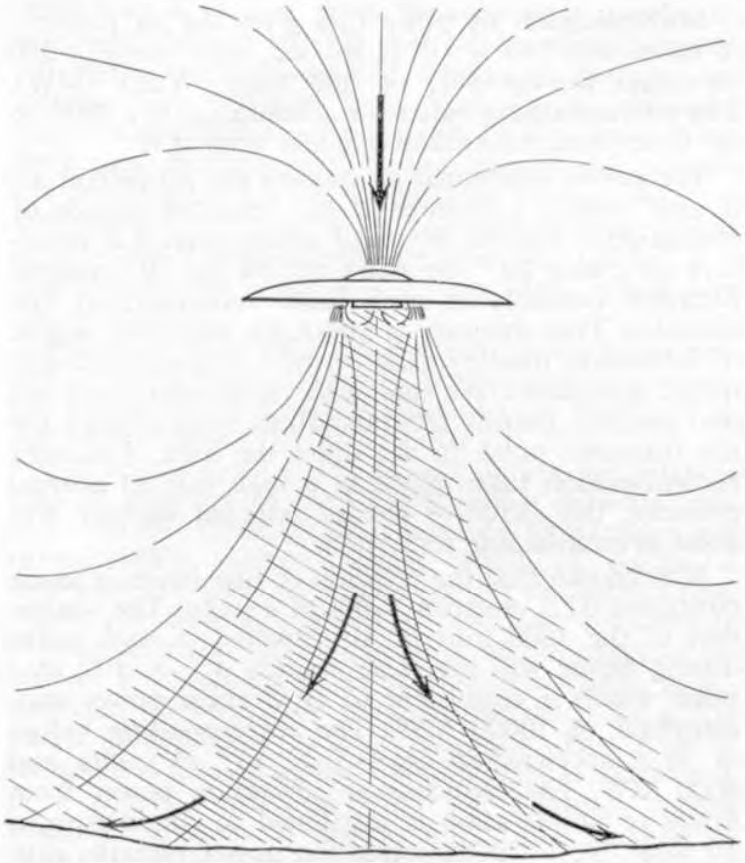


Figure 2.2. **Hydromagnetic aircraft in ground-effect hover.**

There is, however, another possible method of hover and of slow flight that would require considerably less fuel. It wil be dealt with next.

Ground Effect Hover

When the machine is at low altitude so that its magnetic field intersects the surface of the ground, a trap is formed from which ionised air cannot readily escape. The aircraft then becomes a hovercraft, with the magnetic field acting as its skirt. The power needed to keep it in the air then diminishes sharply to that necessary for maintaining ionisation in the trapped air and for replacing leakage. The magnetic field of course ceases to pulse and it is probable that the cooling fan would be able to supply all the air needed.

Figure 2.2 illustrates this ground-effect condition and shows the direction of the air flow. The actual rate of flow and hence the power involved can be calculated from the rate of diffusion of the ions across the magnetic field. We shall not do the calculation here, perhaps some physicist will volunteer, but it is reasonably certain that very little power is required. The onset of the condition might be expected to become significant as soon as the machine descended below an altitude of about 100 ft. The critical altitude obviously depends on the field strength presented at the ground. The phenomenon certainly offers the prospect of safe and easy landing or take-off.

Spacecraft

The calculations show that the hydromagnetic machine is capable of quite remarkable performances in the earth's atmosphere or, indeed, in any other atmosphere of comparable density. But they also reveal that its power capacity has to be considerably higher than that of any ordinary aircraft. It could hardly be regarded as an economic prospect for conventional local operations. The justification for its high power rests upon its ability to operate at astronomical distances from its home base.

The thrust generated by the machine is determined by, among other things, the density of the propellant. In the lower atmosphere, which contains about 10^{19} particles per cubic centimetre, the hydromagnetic system can produce a force of 30000 tons and more. However, interplanetary space, according to PARKER (2.3) who cites data obtained by the probes Explorer X and Mariner II, contains little more than 10 particles/cc. In that environment the system, unaided, could produce no more than a fraction of a pound of thrust and would be reduced to the status of a ballistic or unpowered vehicle. It would, however, have no difficulty in entering space, being perfectly capable of attaining orbital or even escape velocity before losing its thrust.

Unless the atmospheres of space turn out to be much denser than they appear to be, there is no doubt that this, or any other machine, will require the assistance of an artificial supply of propellant. It is therefore necessary to provide a suitable reservoir, probably in the form of a carrier ship.

It can be shown that a carrier for, say, ten machines capable also of holding around one hundred thousand tons of propellant could be driven by them over interstellar distances. The aircraft turned spacecraft would then have to generate sufficient power to expel the jet at a substantial fraction of the velocity of light. Hence their excessive capacity as aircraft. The space propulsion problem is, however, too complex to be dealt with properly in the present context and we shall confine ourselves to remarking that the use of a propellant carrier would undoubtedly permit a hydromagnetic aircraft to extend its operations deep into space.

Thus there is every possibility that our design, in association with a much larger vehicle, could travel to a distant planet and then operate independently in the alien atmosphere. But, in order to do so, it requires a power capacity that would, by any other standards, be excessive ; and it needs a propulsion system that would not normally be developed for atmospheric use, except perhaps for military purposes. It follows that if the distant planet were inhabited by people accustomed only to home-made aerodynamic machines or rockets of limited capacity, they might well find the appearance and performance of the hydromagnetic craft completely incomprehensible.

The implication is obvious. In the following articles of the series, we shall explore the probable visual and physical effects of a hydromagnetic fusion powered machine upon human observers, their equipment and their environment.

Copyright : R. H. B. Winder.

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IMMENSE TRIANGULAR OBJECT OVER MAJORCA

THE *Sunday Express* for October 9, 1966, reported that Aviation expert Air Commodore Whitney Straight (Deputy Chairman of Rolls-Royce and former Managing Director of B.O.A.C.) and Lady Straight had recently seen a "very, very extraordinary unidentified flying object" over Majorca. It was a huge silver thing, which at times changed shape and size.

For five hours it hovered over Formentor, a headland 40 miles north-east of Palma, Air Commodore Straight said, and more than a dozen people at his summer holiday retreat on the headland saw it.

Asked whether it was a "flying saucer" that he had seen, Air Commodore Straight told the reporter "I would not say that it was until I hear what the American Forces' Base on Majorca have to say. It could well have been some sort of balloon sent up from their base on the island. But then why did it remain absolutely still at 30,000 to 40,000 feet and why did it appear to change shape and size."

Replying on October 17 to a letter from Gordon Creighton, Air Commodore Straight confirmed the details given by the newspaper, and said that he and his friends had watched the object through binoculars and a telescope. He added however: "I do not feel that there was any supernatural explanation for this object, and I think the Americans can supply the answer. I personally have not been in touch with them . . . As you may know, there is an American tracking station in Majorca and I presume that the object in question was some form of calibration device for this station.

"The person who observed it more than I did and saw it more closely is Mr. Michael Huggins of Ca'n Xino, Pollensa. He is an English painter who is resident on the island at all time, and I think it was Mr. Huggins who communicated with the Press.

"The incident took place some time early in September. I can't remember the exact date, but Mr. Huggins may be able to help if you care to write to him."

Mr. Creighton at once wrote to Mr. Huggins and promptly received the following very interesting reply, dated November 1:

"For years I have been reading of 'Flying Saucers' and 'UFOs' with a smile of gentle disbelief. However, I now find myself in an interesting position. **I** have **seen** one, and will describe to you exactly what happened!

"On September 1, my wife and I went out on our fishing boat, leaving Puerto de Pollensa at 11.00 a.m. There was a strong wind at Formentor, so we sheltered behind the island that is in front of the hotel. I did some fishing, while my wife did some sunbathing.

"At 2.00 p.m. my wife drew my attention to what appeared to be a plane. Looking up I saw what looked like a delta-wing bomber—flying *very* high—but *too large* for its seeming height—and *it was not moving*!

"We had no glasses on the boat, and what we saw was with the naked eye. If I had known that it was to remain for FOUR HOURS I would have gone home for my camera and telescopic lens.

"My first reaction was to get away from other human beings, and to experience this alone with my wife. We went half a mile out to sea, and watched.

The object appeared to me like this: 

Later my wife described it to me so: 

She has better eyes than I have, though I would not say that mine are poor. The object was pale blue and well defined. The sun seemed to shine on it on the sunny side, and it was quite motionless, and there was no sound.

"Its height is impossible to tell—for we do not know its size. If it had been Man's largest delta-wing bomber, it could not have been more than 20,000 feet, according to size. However it was quite obviously much higher than 20,000 feet. I imagine something nearer 50,000 feet, at which height any man-made plane is invisible to the naked eye, and more so against a brilliant blue sky.

"We have many planes flying over Mallorca the year round, and we have *some* experience of height. Normally vapour trails are the only indication of a plane as high as our object. There was no vapour trail, as our object was immobile.

"The object was 45° from the horizon and was N.N.E. of Mallorca. We discovered later that it was seen from Menorca—our next island—by the mayor of Mahon, **50 miles away!**

"Naturally I expected it to disappear any moment, and I came back to Formentor. Whitney Straight's servants were fishing off the rocks in front of his house, and they told him of our object. Later Commodore and Lady Whitney Straight told us that they had watched the object for several hours through a very powerful telescope.

"We sailed back to Puerto de Pollensa at 4.30 p.m. and the object was visible all the way. At Puerto de Pollensa I pointed it out to many people. What we

(*continued on page iii*)

AIRSHIPS OVER TEXAS

A contribution to the study of the 1896-1897 wave

by Donald B. Hanlon and Jacques Vallée

CONSIDERABLE attention has recently been devoted to the 1896-97 American wave[1, 2]. This phase of UFO activity had first been recognised by Fort[3] and has been discussed in books by Keyhoe[4], Ruppelt[5] as well as in more recent publications[6]. But it is only in the last few months that it began to be really clarified. Although Dr. J. Allen Hynek had called attention to the dramatic Leroy episode[7] as early as 1960, it was not until the publication of the story in 1965 by one of the authors[6] that a full-scale study of the wave was undertaken. This long-needed investigation has produced an unprecedented amount of data. At the same time, most researchers interested in this aspect of the mystery have found themselves in complete agreement regarding the very high significance of the new data so suddenly brought to light.

An important remark that has been presented in the pages of the REVIEW by Clark[1] is that " the 1897 wave indicates the futility of any attempt to divorce flying objects from the general situation in which they operate." It is quite clear that the similarities which had been noted between the behaviour of the 1897 airships and modern observations must now be regarded with caution.

The fact remains, of course, that many features of the 1897 sightings closely parallel UFO behaviour during the major waves of the post-war period. It is striking to read in Clark's article that an object seen on April 10, 1897 " dropped what looked like a parachute with a light attached to it ", an observation we have come to regard as typical in the French sightings of 1954 and which is also found time and again in the American files—for instance in the recent Exeter case[8]. Similarly, the high proportion of " occupant " cases and the pattern observed in Type I reports (not to mention such obvious features as the reported size of the objects, or the relationship between light frequency and acceleration), tend actually to support earlier claims that we are dealing precisely with the same type of objects—that the airships are UFOs in the modern sense. What is entirely disturbing is the reported behaviour of the operators and the appearance (which Clark with reason calls " almost ludicrous ") of the vehicles themselves.

Accordingly, the purpose of the present article is twofold :

(i) To further document the analysis of that period by presenting a series of thirty sightings, most of them unpublished.

(ii) To show how the patterns already observed by Clark[1] and Hanlon[2] are further substantiated as the acquisition of new evidence progresses.

Observational material

For convenience, we give in table form the dates and sources for the accounts which we describe in detail below in chronological order. All these sightings were made **in a twelve day period** and within two hundred miles of Fort Worth, Texas (see map).

1. ' That Denton is not behind the other towns and cities in North Texas is shown by the fact that the mysterious airship of which so much has been said and written in the last few days, has been seen here by at least two credible persons, one a gentleman and the other a lady, whose reputation for truthfulness cannot be assailed.' The airship is dtscribed as cigar-shaped with a light, moving slowly. Then it accelerated " at a terrific rate." There was a row of windows along the side. One witness observed it through a marine telescope and said " I do not doubt that it was an airship." It was said to be about fifty feet long.

2. Weatherford : " Last night at 9 o'clock the airship that has been mentioned in *The News* from Oklahoma and other points, was seen here. It passed over the city in a south-westerly direction and lights were thrown out from the front, resembling the headlight of an engine. The machine was seen here by many people."

3. " Various and truthful citizens of Corsicana today declared that the airship, which has received not a little mention in the press this week, passed over the city last night. It was described by one, who is emphatic in the statement that he saw it, as being a bright light a long distance from the earth and was moving at rather a fast speed across the firmament."

4. A man from Ennis said that he saw the airship the previous night from Fort Worth.

5. Paris : several persons saw the airship, including J. A. Black, a nightwatchman. He got a good look at it and described it as cigar-shaped, 200 feet long, with sails or wings outstretched on either side. A dog howled until the airship passed from sight.

6. Sherman : ' The mysterious aerial navigator that has caused so much newspaper comment recently has been sighted by W. S. Hellier of the Missouri, Kansas and Texas railroad at this place. This is what Mr. Hellier says about it : " I was standing on the pavement on the north side of the public square last night about 10 o'clock when I noticed a dark object begin to pass between the

TABLE

Case identification						Source	
remarks	No.	Date	Time	Place	Witness	Dallas Morning News	Houston Post
	1	About 13		Denton		15 April, 1897	
	2	14 April	2100	Weatherford		16 April	
meteor ?	3	night 14-15		Corsicana		16 April	
	4	night 14-15		Fort Worth		17 April	
	5	night 15-16		Paris	Black	17 April	
	6	15 April	2200	Sherman	Hellier	17 April	18 April
	7	16 April		Farmersville		18 April	
	8	16 April	2130	Granbury	Gresham	19 April	
	9	17 April	0116	Childress	Smith		22 April
	10	17 April		Texarkana		18 April	
	11	17 April		Garland		18 April	
	12	17 April		Bonham		18 April	
	13	17 April		Cleburne		18 April	
	14	17 April		Tioga		18 April	
	15	17 April		Mansfield		18 April	
misquote	16	17 April		Ladonia		18 April	
	17	17 April		Forney		18 April	
	18	17 April		Stephenville		19 April	
	19	17 April		Waxahachie		19 April	
	20	17 April		Greenville		19 April	
accident	21	17 April	0600	Aurora	Weems	19 April	
	22	night 17-18		Bryan			20 April
	23	night 18-19	0010	Atlanta	Nelson		22 April
	24	19 April	2130	Longview			22 April
	25	19 April	2330	Belton			22 April
	26	19 April		Groesbeck	Johnson		22 April
landing	27	22 April	2330	Rockland	Barclay		22 April
landing	28	night 22-23	2400	Josserand	Nicholas		26 April
mistake	29	night 25-26		Pine Valley			28 April
	30	night 25-26		Merkel			28 April

earth and the moon. At first I thought it was a cloud, but I noticed at the same time that it was perfectly shaped. The object was going eastward and not apparently at any great rate of speed. It was an elongated oval, perhaps six times its diameter in length. After it passed by the moon I saw no more of it."

7. Farmersville : Several persons saw the airship. Two said they saw men on board. One said he could clearly hear them singing ' Nearer My God to Thee '. He said they were distributing temperance tracts.

8. Granbury : Newt Gresham at 9.30 p.m. was drilling the Riddle Rifles when the airship approached. He ordered the company to fire on the object. It later disappeared.

9. Childress : ' The much-talked-of airship was seen here last night about 1 : 16 o'clock. Rev. J. W. Smith was the first to discover the curious aerial monster. He thought at first that it was a star shooting, but after watching it a moment or two, saw that it was not. He then called to his mother-in-law, Mr. Charley Norris, and also called to Mr. Bates and wife, near neighbours, who were up at the time. Charles Norris ran over to his mother's and called out several members of the family, who saw the ship. It soon disappeared, travelling in a westerly direction. Rev. Smith thinks it must have been 2,000 feet high and travelling very fast.'

10. Texarkana : A telegraph operator at Hope, Ark., said he saw the airship. It is not clear whether he saw it from Hope or from Texarkana.

11. Garland : A man said he saw wings on sides and back of cigar-shaped object.

12. Bonham : Several saw ship pass and heard motors.

13. Cleburne : Sighting of the airship. No details given.

14. Tioga : Sighting, no details.

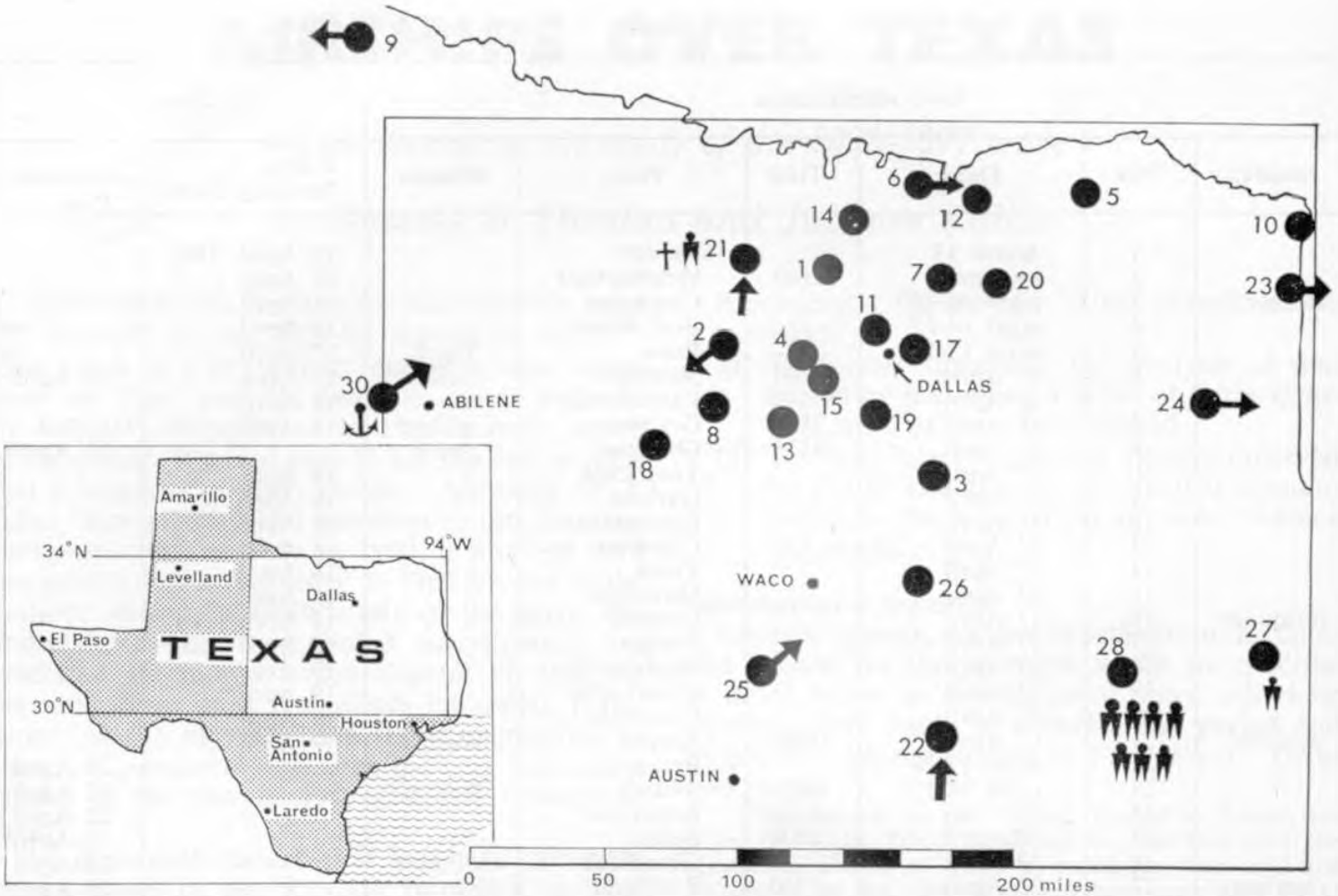
15. Mansfield : Airship was said to be cigar-shaped with wings on either side. Had a front end headlight. Side lights were green with bright red light in rear.

16. Ladonia : A sighting was mentioned, but the **News** several days later ran a correction which said that the man had been misquoted, that he had not seen the airship.

17. Forney : Sighting of the airship. No details given.

18, 19, 20. Stories from Stephenville, Waxahachie and Greenville say that people have talked to crewmen of the airship.

21. Aurora : ' About 6 o'clock this morning the early risers of Aurora were astonished at the sudden appearance of the airship which has been sailing throughout the country. It was travelling due north, and much nearer the earth than before. Evidently some of the machinery was out of order, for it was making a speed of only ten or twelve miles an hour, and gradually settling toward the earth. It sailed over the public square and when it reached the north part of town collided with the tower of Judge Proctor's windmill and went to pieces with a terrific explosion, scattering debris over several acres of ground, wrecking the windmill and water tank and destroying the judge's flower garden. The



pilot of the ship is supposed to have been the only one aboard, and while his remains are badly disfigured, enough of the original has been picked up to show that he was not an inhabitant of this world. Mr. T. J. Weems, the U.S. Signal Service officer at this place and an authority on astronomy, gives it as his opinion that he was a native of the planet Mars. Papers found on his person—evidently the records of his travels—are written in some unknown hieroglyphics, and cannot be deciphered. This ship was too badly wrecked to form any conclusion as to its construction or motive power. It was built of an unknown metal, resembling somewhat a mixture of aluminium and silver, and it must have weighed several tons. The town today is full of people who are viewing the wreckage and gather specimens of strange metal from the debris. The pilot's funeral will take place at noon tomorrow. Signed: E. E. Haydon.' (see note 10).

22. Bryan: 'A number of Bryan people claim to have seen the mysterious airship pass over that town Saturday night. It was going north.'

23. Atlanta: 'There was considerable excitement here today, caused by a visitation last night by the mysterious airship. It was first seen by Jim Nelson, a farmer, living one and a half miles west of here. He had walked out into his yard just after midnight, when his attention was attracted by a peculiar noise and looking up he discovered the mysterious aerial traveller. It seemed to be descending straight to the earth with great rapidity and Mr. Nelson's hair stood out with fright, as he mistook it for a meteor and momentarily expected it to strike the earth, explode and blow himself, his family and earthly possessions into eternity. But when within two or three hundred feet of the earth it paused for an instant, coming to a sudden stop, almost like a heavy weight falling until it reached the end of a rope sustaining it, then it moved off at a rate of speed about equal to that of an ordinary passenger train, in the direction of this city. Having read in the papers of an airship appearing at different places, he decided this must be the mysterious stranger and having telephone connection with this city, he immediately rang up central and reported what he had seen.

'Mr. Boothe, the telephone manager, being in the office, looked out for the airship, which made its appearance on time. While passing over the city it was seen by many of the best citizens. Lee Wicks, night policeman, saw it distinctly and describes it as being about thirty feet long and the body or hull being about the proportions and shape of a skiff, and seemed to be propelled by revolving wheels and fitted with sails to guide its course. Both Mr. Wicks and Mr. Boothe agree in their description of the ship, and both believe the motor power to be electricity.

'Dr. Crossly, Jack Bangus, Dr. Connelly, Chess Mayes, Tom Swint, Dick Hogan, Paul Dunklin, R. T. Cope and Mr. Huffmaster, night operator, all are reported to have seen the ship, and verify the statement and description given by Boothe and Wicks. When first seen by Jim Nelson, there were only faint gleams of red, green and blue lights showing, but just after starting off horizontally it shot out a glaring gleam of white light, which was directed towards the earth in front of the airship at an angle of about 45 degrees and lighted a circle of about thirty feet diameter as bright or brighter than the noonday sun. This great light and its wonderful power is supposed to have been a searchlight. While passing over this city the speed of the airship was from five to fifteen miles an hour. It slowed up just before reaching the business part of the city and in passing over this portion

its speed was not above five miles an hour. It was travelling almost due east and the stream of light was shut off just after passing the city limits. The opinions regarding this mysterious ship are about as numerous as the population. Some who did not see it are inclined to brand the story as a fake, but the character of the men who saw it cannot be questioned. It is impossible to give all the opinions, but one that seems worthy of consideration is that the airship is the property of a gang of cracksmen, who by the aid of the searchlight and X-rays, under the management of scientific experts, sail over a town and look through the walls of the houses and bank vaults and locate the booty; that they return on a later date and secure it, and then disappear by the aid of their airship. Another solution offered is that it is an exploring party sent out by some other planet. The most plausible theory seems to be that some inventor has succeeded in solving the problem of aerial navigation and with a party of his friends is out on an aerial trip.'

24. Longview: 'Last night about 9.30, the *Post* correspondent and family on returning from church saw the so-called airship. A bright light, seemingly about the size of Venus, moved swiftly to the Northwest, disappearing beneath the horizon. In a few minutes it reappeared rising nearly to the zenith and rapidly traversed the heavens in an easterly direction. The light emitted a series of intermittent flashes of a steel colour. No car was seen.'

25. Belton: 'Last night quite a crowd of responsible people of this place assembled for the purpose of watching for that much-talked-of airship and at 11.30 o'clock it was seen coming from the southwest at an immense velocity. It dipped and but for the fact of bearing just a little to the left of the "New Surprise" show tent, directly in front of Peay's hotel, the tent would have suffered great injury, judging from the velocity of the ship. Missing the tent, it passed by the northwest corner of Peay's hotel and rising passed from view. The passengers on board their aerial wonder spoke as they passed, but could not be understood on account of the velocity. Belton people have been sceptical heretofore, but they now believe. The race was so swift that no proper estimate could be formed as to the dimensions; however, about ten persons were distinctly seen.'

26. Groesbeck: 'Mr. B. F. Johnson saw the mysterious airship last night, as did several of his neighbours.'

27. Rockland: 'Mr. John M. Barclay, living near this place, reports that last night about 11 o'clock, after having retired, he heard his dog barking furiously, together with a whining noise. He went to the door to ascertain the trouble and saw something, he says, that made his eyes bulge out and but for the fact that he had been reading of an airship that was supposed to have been in or over Texas, he would have taken to the woods. It was a peculiar shaped body, with an oblong shape, with wings and side attachments of various sizes and shapes. There were brilliant lights, which appeared much brighter than electric lights. When he first saw it, it seemed perfectly stationary about five yards from the ground. It circled a few times and gradually descended to the ground in a pasture adjacent to his house. He took his Winchester and went down to investigate. As soon as the ship, or whatever it might be, alighted, the lights went out. The night was bright enough for a man to be distinguished several yards, and when within about thirty yards of the ship he was met by an ordinary mortal, who requested him to lay his gun aside as no harm was intended. Whereupon the following conversation ensued: Mr. Barclay enquired: 'Who are you and what do you want?'—'Never mind about my name, call it Smith. I want some lubricating oil and a couple of cold chisels if you can get them, and some bluestone. I suppose the saw mill hard by has the two former articles and the telegraph operator has the bluestone. Here is a ten-dollar bill; take it and get us these articles and keep the change for your trouble.'

Mr. Barclay said: "What have you got down there? Let me go and see it." He who wanted to be called Smith said: "No, we cannot permit you to approach any nearer, but do as we request you and your kindness will be appreciated, and we will call you some future day and reciprocate your kindness by taking you on a trip."

Mr. Barclay went and procured the oil and cold chisels, but could not get the bluestone. They had no change and Mr. Barclay tended him the ten-dollar bill, but same was refused. The man shook hands with him and thanked him cordially and asked that he not follow him to the vessel. As he left Mr. Barclay called him and asked him where he was from and where he was going. He replied "from anywhere, but we will be in Greece day after tomorrow." He got on board, when there was again the whirling noise, and the thing was gone, as Mr. Barclay expresses it, like a shot out of a gun. Mr. Barclay is perfectly reliable."

28. Josserand: 'Considerable excitement prevails at this writing in this usually quiet village of Josserand, caused by a visit of the noted airship, which has been at so many points of late. Mr. Frank Nichols, a prominent farmer living about two miles east of here, and a man of unquestioned veracity, was awakened night before last near the hour of twelve by a whirring noise similar to that made by machinery. Upon looking out he was startled upon beholding brilliant lights streaming from a ponderous vessel of strange proportions, which rested upon the ground in his cornfield.

'Having read the despatches published in the *Post* of the noted aerial navigators, the truth at once flashed over him that he was one of the fortunate ones and with all the bravery of Priam at the siege of Troy Mr. Nichols started out to investigate. Before reaching the strange midnight visitor he was accosted by two men with buckets who asked permission to draw water from his well. Thinking he might be entertaining heavenly visitors instead of earthly mortals, permission was readily granted. Mr. Nichols was kindly invited to accompany them to the ship. He conversed freely with the crew, composed of six or eight individuals about the ship. The machinery was so complicated that in his short interview he could gain no knowledge of its workings. However, one of the crew told him the problem of aerial navigation had been solved. The ship or car is built of a newly-discovered material that has the property of self-sustenance in the air, and the motive power is highly condensed electricity. He was informed that five of these ships were built at a small town in Iowa. Soon the invention will be given to the public. An immense stock company is now being formed and within the next year the machines will be in general use. Mr. Nichols lives at Josserand, Trinity County, Texas, and will convince any incredulous one by showing the place where the ship rested.'

29. Pine Valley: 'The airship—the genuine, real live thing—was seen last night by several parties whose word is far beyond question and of whom some of the most responsible persons in the community. They were at church when it was seen from the inside through a window; considerable excitement prevailed. It appeared to be a long distance off, at an angle of about 45 degrees from where the crowd was standing, moving very slowly: was of cigar shape, as has so often been described: had two large wings on each

side ; one set was just in front and slightly overlapped the rear set, but appeared to be a great deal larger The colour of the object seemed to be of a yellowish brown, a bit different than other accounts. The propeller was at the bow and, as well as the crowd could distinguish it, was made of long paddles, even as long as the ship itself. The much-heard-of searchlight was on the stern of the ship and appeared to cover the entire stern. It seemed to be a very large light and it would go out and relight at regular intervals. This was explained by some to be a disinclination of its navigators to being perceived, that it merely turned on the light occasionally to discover their whereabouts. The light was a deep golden colour and some of the observing party declared they could see plainly enough to have picked up a fly on the floor had there been no other light in the house. At this juncture, the ship had almost gone out of sight from the window and the crowd decided to look at it, but when they got outside it was nowhere to be seen. Upon returning and making more careful observation they found it to be a lightning-bug or fire-fly crawling slowly across the window-pane.'

30. Merkel : ' Some parties returning from church last night noticed a heavy object dragging along with a large rope attached. They followed it until in crosssing the railroad it caught on a rail. On looking up they saw what they supposed was the airship. It was not near enough to get an idea of the dimensions. A light could be seen protruding from several wings. One bright light in front like the headlight of a locomotive. After some 10 minutes a man was seen descending the rope : he came near enough to be plainly seen ; he wore a light blue sailor suit, was small in size. He stopped when he discovered parties at the anchor and cut the rope below him and sailed off in a north-east direction. The anchor is now on exhibition at the blacksmith shop of Elliott & Miller and is attracting the attention of hundreds of people.'

Discussion

On the basis of several detailed descriptions of the airships seen at close range, descriptions that use such terms as ' wings ', ' wheels ', ' carriage ', etc., Clark makes the strong assumption that the phenomenen is " a kind of heavier than air construction built for limited flights through the immediate atmosphere. It was most decidedly **not** any sort of spacecraft." This statement is somewhat ambiguous. If it is meant that **in the appearance of the objects to the observers,** they could only be interpreted as airships, the point is certainly well taken ; if it is meant, however, that the intrinsic features of the craft made them drastically different from the class of UFO phenomena observed today, then we disagree with the statement. In addition to the similarities noted in our introduction, there are, in our view, three characteristics of the airships that duplicate the performances observed today : (i) The very general description of the objects as ' cigar-shaped ', (ii) the dramatic way of arrival (' descending straight to the earth with great rapidity ' in case No. 23) and departure (' like a shot out of a gun ' in case No. 27) and (iii) the reported noise ' whnning ' or ' whirling ' in case No. 27, witness ' awakened by a whirring noise similar to that made by machinery ' in case No. 28).

Not only were these performances beyond the technology of 1897, but it would still be impossible to duplicate them : the airships have the characteristics of a ten-passenger vertical take-off and landing aircraft creating little noise and no ground disturbance, and not propelled by rockets, capable of both extremely high horizontal speeds and remarkable hovering or stationary flight ! They violate the laws of inertia and aerodynamics precisely in the same manner as our ' modern ' UFOs (see note 11). Yet their outside appearance seems well-designed to convey the impression that they are nothing but advanced dirigibles, just within the grasp of an American farmer of 1897. As for the conversations with the crews, they are also disturbing to the highest point, if they are reliably reported. It should be remembered, however, that **not all occupants were described as humans.** Hamilton himself, in Leroy, spoke of ' six of the strangest beings I ever saw. They were jabbering together, but we could not understand a word they said.' Later he refers again to ' the cursed thing with its big lights and hideous people.' On the contrary, in most of the Texas encounters, there was communication of the most uncomplicated and mundane nature between the witness and the operators—this duality is indeed present in modern time : it constitutes one of the major mysteries of the French wave of 1954 (cf. also Carrouges book *Les Apparitions de Martiens* and the South American cases).

A great deal of research and discussion will undoubtedly be necessary before this duality can be understood. To appraise objectively the 1897 sightings, one must replace them within the entire history of the rumours of aerial visions—and, perhaps, the strange astronomical observations—that flourished during the second half of the last century and may have culminated in the Siberian catastrophe of 1908 and the New Zealand wave of the following year. What is remarkable in the American wave itself is the revelation of a much higher proportion of landings than was originally suspected, and the discovery of a pattern of contact so remarkable that it may open an entirely new avenue of approach to the UFO mystery.

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8 Fuller, J. : *Incident at Exeter,* Putnam, 1966.
9 The authors wish to thank Mr. Frank Masquelette, of the editorial staff of the *Houston Post,* for his very helpful contribution in locating the sighting accounts discussed in this article.
10 A special investigation of the case is under way. Progress will be reported in the REVIEW.
11 As we write this article, it has just been announced that the US Army's vertical VTOL (vertical take-off and landing craft) has crashed during a test.

EVEN MORE AMAZING . . . *Part IV*

Translated from the original deposition by Gordon Creighton

This is the final instalment of the statement by Antônio Villas Boas, given to Dr. Olavo Fontes, and Sr. Joao Martins at Rio de Janeiro on February 22, 1958.

Synopsis of account related in Parts I, II and III :
On the night of October 15/16, 1957, Antônio Villas Boas, a Brazilian farmer living in a remote part of the State of Minas Gerais, was ploughing a field. A strange machine descended from the sky, alighted and—so he claims—he was forcibly abducted by helmeted and uniformed creatures. Aboard the machine the terrified farmer was stripped, examined, subjected to tests and " tranquilised ", whereafter he was introduced to a naked, fair-skinned, red-haired woman with slant eyes, who seduced him. When, at the conclusion of the act the woman left him, a crew member returned his clothes to him.

THE others remained seated, without looking at me. We walked towards the small ante-room and as far as the outer door, which was open again, with the ladder already rolled down. However, we did not go down it, for the man made a sign to me to accompany him towards a platform which was there, on either side of the door. This platform went around the machine and, although narrow, permitted one to go along it in either direction.

To begin with we went along towards the front. The first thing I noticed was a sort of metal projection, square in shape and firmly fixed into the side of the machine, and sticking out (there was a similar thing on the other side). Had these two parts not been so small I would have judged that they were wings for aiding the thing to fly. From their appearance I think that their purpose was perhaps to move up or down, controlling the rise or the descent of the machine. I admit however that at no moment, even when the craft took off, did I notice any movement of them.[1] And so I cannot explain what purpose they served.

Further on towards the front, the man pointed out to me the three metal shafts that I have already mentioned, solidly set (the two outer ones) in the sides of the machine and (the middle one) right in the front, as though they were three metal spurs. They were all of the same shape and length, very thick at the base and tapering off to a fine point at the tip. The position of all three was horizontal. I don't know whether they were of the same metal as the craft, because they were giving off a slight reddish phosphorescence, as though they were red-hot. However, I felt no heat.

A little bit above the bases of them, where they were attached to the craft, there were reddish lights set in it. The two side lights were smaller and round. The front one was enormous, also round, and was the " front headlight " of the machine, which I have already described. All around the hull of the craft and slightly above the platform, on which they cast a reddish light, were countless small square lamps similar in appearance to those used for the interior lighting of the machine.

In front, the platform did not go the whole way round, but ended near a large semi-projecting thick sheet of glass elongated towards the sides and stoutly embedded in the metalwork. Perhaps it served for seeing through, for **there were no windows anywhere at all.** I think however that that would be difficult for, seen from the outside, the glass seemed very blurred. Seen from inside I don't know how it would be, but I don't believe it could be any more transparent.

I think that those front spurs released the energy that drove the machine forward, because, when it took off, its luminosity increased extraordinarily, merging completely with the lights of the headlamps.

Having seen the front part of the machine, we returned to the rear (the back part bulged out much more than the front part). But, before that, we stopped for a few moments and the man pointed upwards to where the enormous dish-shaped cupola was rotating. It was turning slowly, completely lit up by a greenish fluorescent light coming from I don't know where. Even with that slow movement, you could hear a noise like the sound of air being drawn in by a vacuum-cleaner, a sort of whistle

(like the sound of air in movement when it is being sucked through lots of little holes ; I did not see any holes, however. That is just by way of comparison).

Later, when the machine began to rise from the ground, the revolving dish increased its speed to such a point that it became invisible, and then only the light could be seen, the brightness of which also increased quite a lot, and it changed colour, turning to a vivid red. At that moment the sound also increased (showing that there was a connection with the speed of rotation of the round dish revolving on the top of the craft) and turned into a veritable hum or loud whine. I didn't understand the reasons for these changes, and I don't understand what would be the purpose of the luminous revolving dish, which never stopped turning for a single moment. But it must have had some use, since it was there.

There seemed to be a small reddish light in the centre of that revolving cupola or dish, but the movement prevented me from verifying this with certainty.

Returning now to the back part of the machine, we again passed in front of the door and walked on, following the rearward curve. Right at the back, in the place where the tail of an aircraft would project, there was a rectangular piece of metal set in a vertical position and running from front to back across the platform. But it was quite low, no higher than my knee, and I was able to step over it easily to go to the other side, and come back again.

As I was doing so I noticed, on the floor of the platform, one on either side of the plate, two inset reddish lights in the shape of thick bulging cuts. They resembled aircraft lights, though they were not flashing.

I think however that the piece of metal in question was a sort of rudder for changing the machine's direction. At any rate I saw this piece of metal move towards one side at the moment when the machine—then stationary in the air at a certain height after taking off—abruptly changed direction before starting to move off at a fantastic speed.

Having also seen the rear part of the machine, we returned to the door. My guide now pointed to the metal ladder and signed to me to go down it. I obeyed. When I was down on the ground I looked up. He was still there. Then he pointed to himself,[2] and then pointed to the ground, and finally to the sky towards the south. Then he made a sign to me to step back, and he disappeared into the machine.

The metal ladder now began to get shorter, the steps arranging themselves one above the other, like a stack of boards. When the ladder reached the top the door (which, when open, was the floor) began, in its turn, to rise until it fitted into the wall of the craft and became invisible.

The lights of the metal spurs and of the headlamps and of the revolving dish all became brighter, while the dish was spinning faster and faster. Slowly the craft began to rise, vertically. At that moment, the three shafts of the tripod on which it had been standing rose towards the sides, the lower part of each leg (narrower, rounded,[3] and ending in an enlarged foot) began to enter the upper part (which was much thicker and square), and when that was finished, the top parts began to enter the base of the machine. Finally there was no longer anything to be seen there ; the base was smooth and polished as though that tripod had never existed. I did not manage to make out any marks indicating the places where the shafts had fitted in. Those people certainly did a good job of it.

The craft continued to rise slowly into the air until it had reached a height of some thirty to fifty metres. There it had stopped for a few seconds, and at the same time its luminosity began to get still greater. The whirring noise of the air being displaced became much more intense and the revolving dish began to turn at a fearful speed, while its light changed through various colours till it was a vivid red. At that moment, the machine suddenly changed direction, with an abrupt movement, making a louder noise, a sort of " beat " (this was when I saw the part that I have called the " rudder " move to one side)

Then, listing slightly to one side, that strange machine shot off like a bullet towards the south, at such a speed that it was gone from sight in a few seconds.

Then I went back to my tractor. I left the craft at roughly 5.30 in the morning, having entered it at 1.15 in the early hours. So I had been in there for **four hours and fifteen minutes.** A very long time indeed.

When I tried to start up the engine of the tractor, I found that it still was not working. I looked to see if there was some defect, and discovered that one of the battery leads had been disconnected and was out of place. Somebody had done that, for a well secured battery lead doesn't come undone by itself (I had checked them when I left home). It must have been done by one of the men after the tractor had stopped, with its engine dead, probably while they were capturing me. It could have been done to prevent me from escaping again should I manage to free myself from their hold. They were pretty sharp-witted people ; there was nothing that they hadn't foreseen.

Apart from my mother, I haven't told my story to anybody till now. She said I should never get mixed up with those people again. I had not the courage to tell my father, for I had already told him about the light that had appeared in the paddock of the farm and he had not believed me for he said I " had been seeing things."

Later, I decided to write to Senhor Joao Martins, after reading one of his articles in *O Cruzeiro*, in November, in which he appealed to readers to report to him all cases to do with the Flying Saucers. Had I possessed enough money, I would have come earlier. But as I didn't, I had to wait until he said he would help me with the cost of the journey.

I am at your disposal, Gentlemen. If you think

I should return home, I will go home tomorrow. But if you wish me to stay longer, I shall agree to do so. That is why I came.

[*End of the A. V. Boas deposition.*]

Notes by Gordon Creighton

[1] There is a discrepancy between this and Dr. Buhler's version as given by me in FLYING SAUCER REVIEW for January/February 1965. In Dr. Buhler's version, Antônio Villas Boas said that these short projecting things "like planks" made a 30° turn when the machine took off. I think it possible that Dr. Buhler and Dr. Mario Prudente Aquino (who, as Dr. Buhler tells me, spent only about 1½ hours interviewing Antônio, whereas Dr. Olavo Fontes had Antônio with him in Rio de Janeiro for several days) may have misunderstood this point, and that their mention of a 30° turn really refers to the movement of the rudder. There are a good many minor discrepancies of this kind, and Dr. Buhler says he may make another trip to the Interior to see Antônio and try to clear them all up.

[2] Here is another discrepancy. In the account published by Dr. Buhler, if I have understood it correctly, there is no reference to the man having pointed first at himself, then at the ground and then at the sky. Instead, he is represented as having gone down the ladder with A.V.B. and, on reaching the ground, as having "made two holes in the earth, pointing first to one hole and himself and then skywards, and then to the other hole and to the earth and A.V.B." (though I notice with regret that in our attempt to squeeze the story into the available space, we did not describe this miming by the man as fully as we should have done). This, then, is another discrepancy to be ironed out. One wonders whether something has crept in here from another case? (For example, in the José Higgins case one of the entities allegedly made holes in the ground and pointed to them as though they represented planets.)

[3] In his new book, *El Gran Enigma de los Platillos Volantes*, Antonio Ribera reproduces an absolutely astonishing photograph, said to have been taken in the Italian mountains near Genoa in June 1963, which appeared in the newspaper *Domenica del Corriere* of September 9, 1963. The photograph shows a landed craft which I believe (as Ribera does) to be **identical with A.V.B.'s machine.** It shows the flat "dish" on top, the two short projecting "planks" or "wings", the "cat-walk", the ladder, and the three legs. It can be seen quite clearly that these legs resemble those of a camera tripod, being thicker at the top and with a square cross-section, while the lower part is thinner and appears to be round in cross-section. (See also Antonio Ribera's letter in FLYING SAUCER REVIEW for May/June 1965, with our artist's line reproduction of the machine shown in the Italian photograph.)

[Dr. Olavo Fontes's medical report will be given in Part 5 of this article.]

MAIL BAG

Correspondence is invited from our readers, but they are asked to keep their letters short. Unless letters give the sender's full name and address (not necessarily for publication) they cannot be considered. The Editor would like to remind correspondents that it is not always possible to acknowledge every letter personally, so he takes this opportunity of thanking all who write to him.

The truth about Aurora

Sir,—As a postscript to our article 'Airships over Texas' we wish to inform the readers of the REVIEW of new developments regarding the alleged airship observation in Aurora, Texas, of 17 April 1897. Given the highly unusual character of the report, we brought it to the attention of Dr. Hynek, the Air Force's scientific consultant, who very kindly proposed to make a private investigation of the matter. A friend of Dr. Hynek in Texas checked our references to the local papers and sent his conclusions as follows: "After reading these accounts, I drove to Aurora and stopped at the only service station there. The proprietor of the service station is named Oates and the station and his house are on what was Judge Proctor's place. It seems as if Aurora was once the largest town in Wise County and was also the county seat and Judge Proctor was a Justice of the Peace. Mr. Oates would neither confirm nor deny the authenticity of the story but he told me to contact a Mr. Oscar Lowry a few miles down the road in the town of Newark, Texas, which, incidentally, is another thriving metropolis of slightly over 300 inhabitants.

"I found Mr. Lowry just where I was told I would, 'down the road apiece by the schoolhouse.' When I told him what I wanted he asked me to sit down on a bale of hay (I found him in his barn) and he would tell me the story. He was about eleven years old when this happened and he also told me that no less than twenty others have been there before me.

"Mr. Lowry said that Aurora was a busy little town until the railroads put down their new tracks and neglected to include Aurora in their plans. As a result, the town began to diminish as people moved to be near the railroad. E. E. Haydon was a cotton buyer and writer who lived in Aurora and wanted to do something to help keep people in town and to make it a tourist attraction. He got the idea, I suppose, from the actual sighting he had read about and made up his story. The T. J. Weems that was supposed to have been a U.S. Signal Service officer was actually the town blacksmith and, according to Mr. Lowry, the Proctor place never had a windmill on it. To further substantiate the hoax, the cemetery is a Masonic Cemetery and a chart is kept on who is buried there. There are no graves unaccounted for. Mr. Lowry said that Mr. Haydon later told others about his story and many went on letting people believe it.

"The old courthouse is gone in Aurora and Decatur is the county seat of Wise and just a few houses are left in Aurora."

The authors feel that this clarification of the Aurora mystery only adds to the flavour of the entire episode. We are thankful to Dr. Hynek and his friend in Texas for providing us with this colourful new piece of Americana. D. B. Hanlon and J. F. Vallée, Chicago, Illinois.

An Unusual Sighting

Sir,—Reading your letter in the *Daily Telegraph*, I make so bold as to send you an account of my strange experience during the hard winter of 1962/63. I was so impressed and puzzled at the time that I wrote this detailed account enclosed. Apart from mentioning the incident to some friends the same evening I have not told anyone else about it.

In March 1965, however, I did write to the Astronomer Royal but no explanation was forthcoming. For your information, I too am an ordinary down-to-earth practical person, being a retired solicitor's clerk. At the time I was not retired and was too busy to explore further. But I do wonder if it was something from outer space I saw.

Saturday evening

February 2nd, 1963

It had been snowing heavily and when I took my little dog for his evening walk the ground was thickly carpeted with snow, so I decided to go for a short walk—down one side of the road and up the other. Sooty was on a lead, and at the bottom of the road, near Crows Lane, we crossed and returned on the other side walking slowly. I glanced ahead, and at the top of the road, where it swerves at the bend, I saw a dull red glow moving above the ground from side to side. At first I thought it was the rear lights of a car reversing. Then, as the glow still persisted moving, I thought possibly it was snow spots I was seeing, just as one sees sunspots ; I rubbed my eyes. We walked on, no one at all was in sight and the air was very still. Then I stopped and stared, as the object had now emerged from the narrow part of the road and was floundering along. It was a jet-black oblong shape, dark and bat-like, and in the centre a circle of dark dull red light. I stood still, mystified, when the next thing I knew it was coming slowly towards me, taking up the complete crown of the road. When it reached the wider part of the road, near the Orchard Gardens P.H. it floundered and fluttered and slowly rose into the air, across the open space of the shape flapping and billowing like reached housetop level, the red circle still glowing and the black shape flapping and bellowing like a cloak. Then I observed it was dragging behind, like the tail of a kite, a miniature of itself—black, oblong with a glowing red circle in the centre. It stayed for a second or two at rooftop level, then with renewed effort, shot up to a much higher level, floated again, then shot up higher still and disappeared in the clouds. All this was in complete silence as the object made no sound whatever although it struggled hard to get airborne.

N.B. It would seem that the object got caught in the narrow part of the road as tht red glow was drifting from side to side. It was not until it came floundering to the wider part that I could see its shape which took the form of an oblong sail as it floated slowly along towards me. After it became airborne and had disappeared from sight, a gentleman came along, and I asked him if he had seen an unusual object in the sky. He, unfortunately, had been gazing down watching his step, as it was very dangerous walking. He had seen nothing and suggested the object might be something sent out from the Radar Station to warn ships. Needless to say I did **not** say I saw the object become airborne, and that it had previously been floundering about on Mundesley Road !

I have not told anyone of my experience as I'm quite sure no one would believe me, but it is perfectly true, and I am writing to record it just in case someone has had or may have a similar experience. The time was approximately 7.20 p.m. and it was moonlight.

—Miss Bertha Humphries, 83 Mundesley Road, North Walsham, Norfolk.

Correction

Sir,—I am writing to comment upon the article " The Moon and Mars " by Antonio Ribera and José M. Oliver in the FLYING SAUCER REVIEW of May/June 1966.

This article compares features in the Clavius region of the Moon with features on Mars taken from frame 11 of Mariner IV's photographs of Mars. A " foolproof " analysis is made of the comparison of these features. It purports to show that the findings obtained are, to all intents and purposes, impossible by chance.

The analysis which is performed is nonsense and using the results from it can do nothing but harm your cause. Such articles which twist statistics to conform with the views of the authors will only bring your magazine into disrepute. I shall develop my criticism, in detail, below :—

35 features on the Moon and Mars are compared by assigning an arbitrary " awards " scale of 1 to 10 marks according to the degree of similarity between the features observed. The next paragraph, which quotes figures and a problem developed " logarithmically," appears to be rubbish. It is said that the average score is 6.5 marks when the qualifications system is applied. In fact the average score is 6.69[1]. The calculation shown, if that is what it is, is correct but means nothing. No criterion is given from which the author's analysis proceeds.

As I see it the analysis should be conducted as follows :—

Assume a null hypothesis that the degrees of similarity between the features observed occur by chance. From this it would be expected that that mark from 1 to 10 would occur at a frequency of 3.5 (as there are 35 features compared).

In order to analyse the results statistically, a standard " Chi-Squared " test is performed (Reference 1). As the expected frequency in each cell is less than 5, five groups each of two cells are made as shown :

SCORES	1,2	3,4	5,6	7,8	9,10
EXPECTED FREQUENCY	7	7	7	7	7
ACTUAL FREQUENCY FROM TABLE OF COMPARISIONS IN THE ARTICLE	3	3	7	13	9

Performing the analysis, a value of " Chi-Squared " of $10^{2}/_{7}$ is obtained on 4 degrees of freedom. A table of the " Chi-Squared " distribution (Ref. 2) gives a significance level of about 96 per cent.

Therefore the null hypothesis, that the degrees of similarity between these features occurred by chance, can probably be rejected. However such a result is not so statistically significant that it can be published as being correct without further confirmation. More comparisons between features should be made, and a critical look should be given to the " awards " scale to make it less of an arbitrary one.

This significance level of 96 per cent means such results as the authors obtained would occur by chance about 4 times in 100 and NOT once in $2{,}128 \times 10^{53}$!

I suggest that this " rather large " discrepancy be pointed out to your readers who have been misled by the article and its pseudo-scientific analysis. In future you should re-

(Continued on Page iv

LATE ITEM

THE RUSSELL PHOTOGRAPH

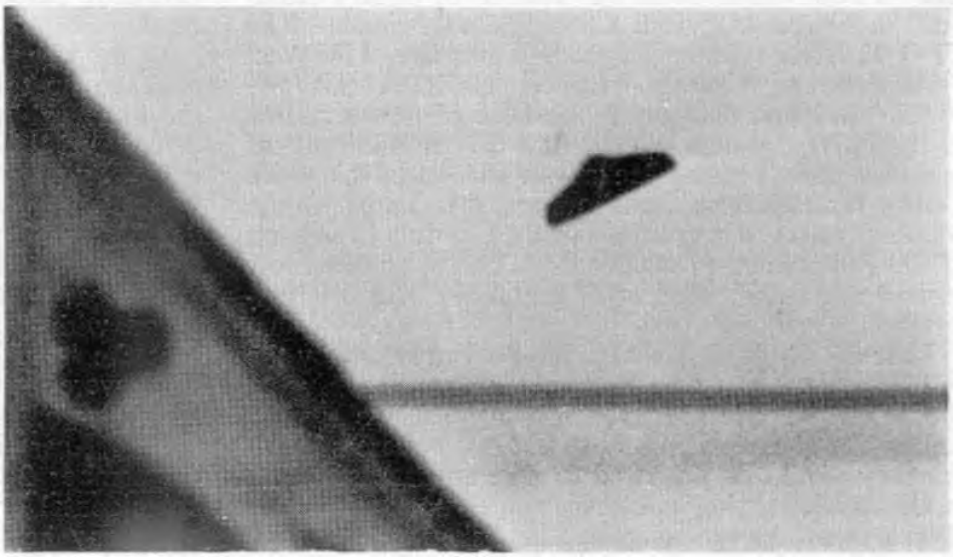
These spectacular photographs of a UFO were taken over a South London Suburb

AT about 2.30 p.m. on Thursday, December 15, 1966, Mr. Anthony Russell, a hairdresser, was standing at the open window of his flat testing for resolution two new 2 x converters for his ZENITH 3N camera (focal length 135 mm increased to 270 mm by one converter). During the testing, the camera, which was loaded with Gratispool colour film, was aimed at the gable of a house on the far side of the road.

The flat is in Lewin Road, Streatham, just to the west of Streatham Common, a grassy recreation area six miles due south from Charing Cross.

Mr. Russell was suddenly aware of an object plummetting from the sky, stopping dead, hovering, and then drifting slowly earthwards with a pendulum swinging motion. He had the good sense to 'slap the camera to infinity' and to take a series of photographs, the last two as the object moved away, at first slowly, and then with considerable speed.

The film was left in the camera so that the remainder could be used at Christmas, and it was then sent for processing after the holiday period. In the meantime, Mr. Russell had told a few friends who had laughed the incident off. Puzzled by what he had seen, he decided to try to find someone who might be interested, but decided against official bodies like the Royal Astronomical and Royal Aeronautical Societies. Glancing through the telephone directory under the word "flying" he chanced on the name of this REVIEW. He wrote to us, telling what he expected to be found on his film, and expressed surprise at the apparent changes of shape of the object he had witnessed.



(1) 1/125 *sec.* *f*/5.6, *focal length* 270 *mm.*

The three transparencies which were successful (out of twelve exposures in all) have had prints taken from them : they are reproduced here and on the cover. Mr. Russell has been interviewed, and the photographs have been sent to Mr. Percy Hennell (the photographic expert who developed and examined the Cappoquin photograph). The prints which we have used were made by Mr. Hennell, who has indicated that they are genuine photographs of an object in the air, and (in the case of No. 1) some distance beyond the house opposite Mr. Russell's flat.

I understand that Mr. Russell's father, an artist, was asked to design a cover for the first Adamski book. Mr. Russell junior was not impressed by the book, and later, after meeting Mr. Adamski, thought even less of the subject of flying saucers. On December 15, 1966, his scepticism received a jolt.

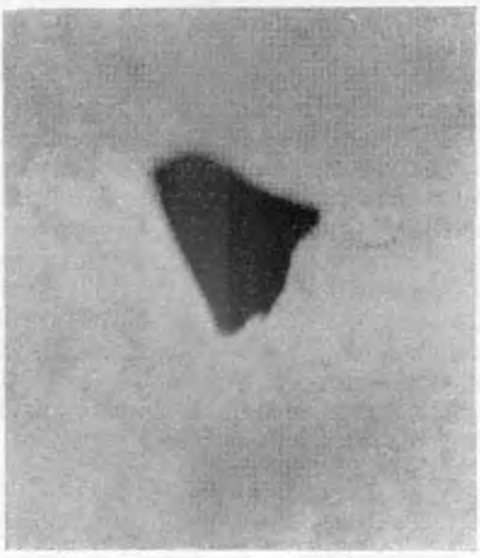
From the sighting point the object appears to have been somewhere on a line which crosses Tooting Bec Common and Clapham Common, in other words NNW from the flat. The afternoon weather situation on December 15, 1966, over that part of London : *Misty, drizzle and rain. Low Cloud ; cloudy, dull and damp. Visibility 2 miles. Ten knot wind.*

A full report will appear in our next issue.

CHARLES BOWEN



(2) 1/125 *sec.* *f*/5.6, *focal length* 270 *mm.*



(3) 1/25 *sec.* *f*/11, *focal length* 540 *mm.*

BOOK REVIEW

AFTER the resounding success of *Anatomy of a Phenomenon*—and FLYING SAUCER REVIEW, correspondence has borne eloquent testimony to the impact of *Anatomy* on many people new to the subject—a new Vallée book was assured of instant attention and eager demand. **Challenge to Science—The UFO Enigma** (Henry Regnery Company, 114 West Illinois Street, Chicago, Illinois 60610, U.S.A. — $5.95)* will not disappoint the host of new students of the UFO problem, or for that matter, the bulk of the old ones either. **Jacques Vallée** and his wife **Janine Vallée** are co-authors of this latest study, which consists of a translation by Gordon Creighton of *Les Phenomenes Insolites de l'Espace,* considerably revised and augmented, with a number of new chapters and appendices.

That the book should also have a Foreword by the eminent American astronomer, Dr. J. Allen Hynek, should attract the attention not only of the regular students, but also of many of those 'waverers' who say they would be prepared to take an active interest in UFOs if only they could see some 'hardware'. Dr. Hynek is a courageous man: he risked his standing among the scientific fraternity by accepting the post of scientific consultant on UFOs to the United States Air Force. He risked that reputation even further by testifying in favour of a serious study of the problem when he appeared before the House of Representatives Armed Services Committee at the recent Hearing on UFOs.

In his Foreword, Dr. Hynek says: "I have personally devoted a portion of my time to this subject, an action that would be unthinkable had I not felt it was worthy of examination. I have long been aware that the UFO phenomenon is a global one and that it has captured the attention of many rational people. Numerous scientists have told me privately of their interest and their willingness to look further into the problem." He concludes that this new work will be of great value to those colleagues, "who publicly choose, like the subject itself, to remain unidentified."

In their text, the Vallées show that despite this lack of identification, there is a mass of data which, when statistically analysed, presents interesting patterns of behaviour on the part of the UFOs, and a challenge to those shy scientists to get on with the job. The opening chapters are devoted to a presentation of cases, some new to readers, some little known and a few well known. Even the famous Marignane Airport (Marseilles) case of October 1952, re-told in Jean Latappy's graphic report, comes up very fresh. Both the global nature of the phenomenon, and the diversity of reported objects are demonstrated. Thereafter, the main purpose of the book is developed as the history of the subject is traced, and the establishment of private investigations and publications, including the first exciting scientific hypothesis—orthoteny—are discussed. The Vallées also examine new patterns and trends, survey reports, examine the great 'waves' and cycles of activity, and the types, sizes and shapes of objects. There are interesting sections too on the 'explainers' and difficulties of identification, and I was particularly delighted to discover a far more complete version of one of my favourite cases—Prémanon—than any I had hitherto read.

In the chapter on orthoteny, the authors carefully package up the veteran theory, and tuck it away in the filing cabinet, labelled 'finis'. Aimé Michel, who discovered this intriguing theory, has already written it off for somewhat different reasons (see F.S.R., Jan./Feb 1966) than those of Vallée, who has made a detailed analysis of the French reports of 1954. The famous Montlevic network was among those so examined, and 'computerised', and the results compared with Michel's. A powerful case is presented that the 'star' networks like Montlevic (October 7, 1954) were the result of chance alignments.

Although, as a layman and non-mathematician, I feel that certain multi-point alignments like BAVIC (September 24, 1954) seem to be more than purely coincidental or random groupings, it is obvious that orthoteny has reached a dead end. Very few other waves have produced an alignment worth the name. Nevertheless orthoteny was of value, for it was a great ray of hope for the puzzled few who were trying to look rationally at the subject. As the Vallées say: "The subject of UFOs has thus been taken out of the list of 'odd phenomena' and 'strange events' . . . and placed under the light of scientific analysis." They also show that it was thanks to Aimé Michel's fertile mind that the desire to check his theory led to new classification and coding systems, and to a dozen computer programmes.

To close, mention must be made of a passage (p. 93) telling of the 'dark age' of 1958-1963 when 'flying saucers' became "a queer memory in the mind of the public", when the dice were loaded against a fair hearing anywhere for even the most sober or highly qualified witnesses of UFOs. When "the best solution seemed to be: if you don't talk about it (the flying saucer mystery), maybe it will go away." I am reminded that this was a period of prolonged decline in the number of world-wide reports, and that it coincided with practically the whole of Waveney Girvan's editorship of FLYING SAUCER REVIEW. But the REVIEW was kept alive, thanks to the Girvan skill and tenacity, and it was during this time that its columns welcomed the works of a new young researcher, mathematician Jacques Vallée, who was busily laying the foundations on which to build up his challenge to scientists to tackle the enigmatic UFO problem.

No library on the subject would be complete without this excellent work.

CHARLES BOWEN

* It is understood that Neville Spearman Ltd., hope to publish a British edition of *Challenge to Science* in the Spring of 1967.

FILE 733 U.F.O.

An LP recording of interviews with many UFO witnessses, including James Flynn of Florida, who claims he was immobilised and temporarily blinded when meeting a UFO. (See FSR July/Aug. 1965) Century Records, P.O. Box 1511, Seattle, Washington, U.S.A. Price $4.97.

THE REFERENCE BOOK OF OUTSTANDING UFO REPORTS

Ed. by Thomas M. Olsen. 160 outstanding UFO reports from 1947 to 1964 collected from several sources and recorded in detail. Size 11″ x 8½″, 138 pp. Published by UFO Retrieval Centre Inc., P.O. Box 57, Riderwood, Maryland 21139, U.S.A. Price $5.95 postage and applicable tax paid.

A new book by Leonard G. Cramp

Many readers will be glad to learn that Leonard Cramp's second book **Piece for a Jig-Saw** (Somerton Publishing Co. Ltd., Somerton, Cowes, Isle of Wight. Price 27s. 6d.) is now available. It is proposed to publish a review in our next issue. For the present, suffice it to say that the book appears to be amazing value for money, for it consists of well over 350 pages, fully illustrated with photographs and a mass of line drawings. The author has devoted several years to practical work checking and re-checking his theories on UFO propulsion and has come to some remarkable conclusions.

'GET WELL' MESSAGE

We were dismayed recently to learn that our valued American researcher and representative Jerome Clark has been very seriously ill. He is still in hospital in Minnesota and the Editor and Directors of FLYING SAUCER REVIEW **know that readers everywhere will join them in wishing him a speedy recovery.**

World round-up

of news and comment about recent sightings

ENGLAND

Sightings at Tilehurst

The following sightings at Tilehurst, near Reading, were reported in an article by Geoff Dunlop in the *Reading Evening Post* of November 11, 1966:

"At first it appeared that the house was on fire. The whole sky was alight. But Mr. Alan Prynn walked around to his back garden, and saw that the light came from no fire.

"Two hundred yards away, 50 to 60 feet up, was a glowing object. Through the morning fog Mr. Prynn could see the cigar-shaped thing move horizontally to the ground. Its speed was about 15 mph, and from its portholed fuselage came rapid bursts of flame.

"If Mr. Prynn was deluded he was not the only one, for at the same time his wife, Philomena, saw a bluish glow like a gas flame going up into the sky.'

"On Tuesday, next day, Mr. Samuel Eedle, head of the Physics Dept. at Stoneham Grammar School, Tilehurst, reported that he was investigating sightings made by one of his pupils—Michael Whittingham, who lives at Tilehurst. Michael, who is 15, had reported that he, his father and brother had on several nights watched an 'object' in the northern sky.

"He had been told about it by a school friend, Adrian Cotterell, also of Tilehurst, who had first seen it on October 13.

"Michael describes it as like a bright star, but closer—and it moved around the sky. He saw it in the east and due north. Through binoculars Michael and his father detailed three colours in the object. One evening it was seen to travel rapidly.

"The Whittinghams' neighbours, Mr. and Mrs. George Ford and his daughter also watched the object for some time on two or three evenings. They saw it moving slowly, too slowly for aircraft and noticed various colours."

Hartley Wintney, and Reading

From the same article in the *Reading Evening Post* of November 11, we learn of two rather scantily reported cases:

"In April this year two Hartley Wintney (Hampshire) residents were convinced they saw a spacecraft over their home. 'It was a colossal roar and was certainly not caused by machinery,' said Mr. John Wilmot. 'It was not like anything I have heard before. The light in the sky faded slowly until it was as dark as the inside of a boot.'

"Reading was visited last August. Amateur astronomer Mr. Alan Eker described 'fast moving points of light in the sky in a square formation. They were not like anything I have seen before.'

"The same lights were seen 30 miles away at Oxford."

Perhaps Mr. Dunlop can oblige us with fuller details of these cases.

Berkshire 'Flying Octopus'

On Thursday, November 10, 1966, an unusual sky object was witnessed over North Berkshire by two people. The first report we received was in the *Reading Mercury* of November 12. The following, more detailed account was taken from the *North Berks Herald* (Abingdon), of November 17. There have been a large number of strange sightings in this area in recent months—an area which includes the Harwell Atomic Energy Research Establishment:

"The flying object which two people—one of them the Clerk of Wallingford R.D.C.—claim to have seen last week remains unexplained. They claim to have spotted it between 11 a.m. and 11.30 a.m. last Thursday near Wittenham Clumps.

"Mr. L. Bullen, Clerk of the Council, and Mr. Alfred Carpenter, a Didcot photographer, were near the Clumps taking photographs to illustrate the cover of the council's official guide.

"'Mr. Carpenter first drew my attention to the thing in the sky,' said Mr. Bullen. 'I thought initially it was an Argosy aeroplane

from Benson. It was high up, and partly obscured by clouds. It moved to the right, but then appeared to move back again. It kept disappearing behind the clouds.'

" Mr. Bullen said it was difficult to describe, but it looked as though ' It had legs dangling from the outside edge—like an octopus. It was rather long.'

" Mr. Bullen said the object had a long plume trailing behind it, ' rather like the jet stream from an aircraft taking off at London Airport.' He said it was not possible to estimate how far away the object was ' and I don't know whether we saw the whole of it.'

" Although there were high clouds, Mr. Bullen said the visibility was very clear at the time.

" Mr. Carpenter said the object looked like ' A flock of birds wheeling round ' when he first spotted it.

" ' It came out of the clouds and then appeared to be solid. I had seen Argosy aircraft flying around from Benson but this object was on a different course, it looked like a Portuguese Man O'War with tentacles and the strange thing about it was that it went backwards as well as forwards.'

" When they returned from Didcot, he studied an Ordnance Survey Map, and estimated that the object was probably flying near Nuneham Courtenay or Sandford when they saw it.

" ' It was visible to us for about a minute, before it disappeared completely behind the clouds,' Mr. Carpenter added."

Caversham ' Cylinder '

From the *Reading Evening Post* of November 18, 1966, we learn of yet another Berkshire UFO report, this time by Ascold Krushelnycky, 12 of Caversham. Ascold, a pupil of Stoneham Grammar School, was interviewed by Messrs. Miller, Crabtree and Turner of the Cambridge University Group for the Investigation of UFOs, as part of their investigation of several of the recent Berkshire cases.

" On Wednesday night Ascold was keeping watch for the Leonid Shower of meteors, which the earth is at present running through.

" About 10.45 p.m. he noticed an object coming in the sky from a north westerly direction. He did not take much notice of it at first—until he realised it was not an aeroplane.

" The object, which was about 60-70 feet above the ground corresponded to the description given by Mr. Prynn. It was cylindrical in shape and about 25 feet long. But Ascold believes there was some kind of slit in the front. He watched the object for about 30 seconds before it passed over his road about three houses to the left of his. He estimated the speed of the object at about 15-20 mph and said he could not hear any sound from it. There were no flames but it was giving off a bluish light. It had no wings.

" The Cambridge students spoke to Ascold before he went to school this morning, and the chairman of the group, John Crabtree, who is studying theoretical physics, said : ' He is a very intelligent boy, and was so straightforward and matter of fact about it that he certainly didn't make it up.' "

Reading mystery object

The *Reading Evening Post* of November 19, carried yet another Berkshire sighting report :

" Last night's sighting was made by 12-year-old Neil Hesman, of 7 Derby Road, and confirmed by his mother, Mrs. Irene Hesman.

" They both saw a large, bright light going vertically into the sky ' like a lift going up at an angle.' Through a pair of ' not very powerful binoculars ' Neil was able to see that the shape of the light was oval. The light was greenish.

" The object was spotted at half a minute past 8 p.m. and Neil and his mother watched it for about a minute before it disappeared."

North Berks again

One more to notch up on the Berkshire November scoreboard was reported in the *Oxford Mail* of November 19 :

" Another mystery object is reported today to have been seen hovering over North Berkshire. This time it is by a housewife who was shutting her dogs up for the night.

" It was about 8 p.m. last night when 25-year-old Mrs. Gillian Partlett, who lives at Hedgerows, Abingdon Road, Clifton Hampden, says she saw the object which seemed to be in the direction of Wittenham Clumps.

" ' I noticed a light out of the corner of my eye and then looked up to see this bright orange object. At first I thought it was an aeroplane and it gradually started coming nearer and nearer to me," said Mrs. Partlett . . . ' It came towards me and then suddenly started moving back into the sky and the light became paler and paler until it disappeared.'

" It was only for about two minutes that the object hovered above her and during this time her two corgis started whining. ' They were making a dreadful noise,' she said."

CZECHOSLOVAKIA

Czech newspaper *Lidova Demokracie,* of September 2, published letters from readers claiming to have seen an unidentified flying object over the Krkonose Mountains. The object appeared to be of a triangular shape, with an orange glow at its centre. One reader claimed to have seen a huge balloon towing a rainbow-coloured triangle in the same region about three weeks ago. This object had been visible for four hours before darkness, and had been seen by several other people.

—(From CTK, Czech Broadcasting Station, in English, 1800 GMT, September 2, 1966).

[*It is possible that the time of the earlier sighting coincided with that of the Bavarian sighting, when U.S. Air Force jets were involved—see World Round-up in the issue for November/December 1966. On that occasion the object was described as a balloon with triangular shape below it*—EDITOR]

HONG KONG

High speed balloon

From the *South China Morning Post* of November 9 we learn of . . .

" The sighting of a balloon-shaped flying object, cruising at high speed over the Lion Rock hill ranges, was reported by a European woman resident in Kowloon Tong yesterday.

" Mrs. Airene Johnson, who lives near the Baptist College, at the end of Waterloo Road, said the object appeared to be green in colour and was flying silently above the Lion Rock Hill ranges shortly after 11 a.m."

ITALY

More about the ' gnomes '

Gordon Creighton has translated for us the following item from *Il Giornale del Mattino* of July 14, 1966—

" The press has been called upon once more to take an interest in alleged space objects. This time the eyewitness accounts come from

Watkins

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HIGHLIGHTS FROM RECENT BACK NUMBERS

1964

January/February
Saucers over Southampton
by Peter J. Kelly

May/June
The Cosford UFO

July/August
The Menzel-Michel Controversy
by Jacques Vallée

September/October
Spindle in the Sky

1965

November/December
The Valensole Affair
by Aimé Michel

1966

March/April
The Cappoquin Sighting
(with photograph)
by Charles Gibbs-Smith

May/June
Valensole—Further Details
by Aimé Michel

July/August
The Strange Case of the 1897 Airship
by Jerome Clark

September/October
Even More Amazing
Serialised version of the A. V. Boas statement (see also in previous issue)

November/December
Design for a Flying Saucer—Part 1
by R. H. B. Winder

Other issues in this period now out of print. Several other numbers prior to March 1963 are still available

several people. One of them is the railway linesman who tends the level-crossing at the village of Fornacette on the Pisa-Florence line.

" Here are the facts. It was not much after 2.00 a.m. during the night of July 13, when the linesman, Camillo Faieta, aged 35 and living at Pontedera, Via Provinciale Pisana 97, who was on duty at the level-crossing station, was suddenly dazzled by a most powerful light.

" Recovering from his initial and comprehensible state of alarm, Faieta attempted to find out what was happening. And so it was that he discovered that the powerful luminosity was coming from the Emissario Canal which flows past at a distance of a few score metres from his level-crossing station.

"Suddenly the light was extinguished, and Faieta saw, or at any rate thought he saw, a stationary object right in the middle of the canal at the spot where a sort of little island about three or four metres wide, and no more than thirty metres long, has formed in the centre of the water. And, on this island, so Faieta declared to the Ansa News Agency, two 'little men' had emerged from the flying saucer.'

" After a short while, the intensely bright light came on again, lighting up everything as though it were day. And the mysterious object rose from the ground without the least sound whatever and vanished in the twinkling of an eye.

"Faieta telephoned the Carabinieri post at Pontedera and the next station along the line, Cascina. Railway police arrived from Cascina shortly afterwards and made an intensive search for any traces of the machine Faieta said he had seen.

" The crossing-attendant at Arnaccio, about a kilometre distant from Fornacette, also reported that he had seen a dazzling bright light and he telephoned to his colleague at Fornacette to ask him what was the matter. Furthermore, a truck-driver named Vittorio Camillini reported that, as he was driving along state highway No. 67 towards Pisa, he had seen an immensely bright very white light shining precisely from the direction of Fornacette, and had been so dazzled by it that in fact he had been obliged to pull up at the side of the road.

" The crosssing-attendant at Arnaccio, Giuseppe Valeriana, had a very clear view of the point of origin of the dazzling light, and consequently his account served to confirm Faieta's statement that the mysterious object had landed.

" Furthermore, there was a motorist driving along the Florence-Mare Road. Just as he was entering the section of road that crosses the Bientina marshes heading for Pisa, he was able to observe the light for some time, as his view of it was not obscured by houses or trees. What he saw was a great fiery thing in the sky, like an intensely luminous ball, which was moving at a staggering speed from Pontedera towards the west."

—Credit : Roberto Pinotti of Rimini.

UNITED STATES OF AMERICA

Salesman's contact claim

The story of Woodrow Derenberger's alleged encounter with UFO and entities near Parkersburg, West Virginia, was carried by several newspapers. The following account, in which Mr. Derenberger is described as a sober, church-going local salesman from the Parkersburg district, is taken from the *Albuquerque Journal* of Nov. 5, 1966, from Albuquerque, New Mexico, sent to us by reader A. J. Van Cleave of Taos, N.M. We also have accounts from the Denver Post and The Cleveland Press based on UPI news items . . .

" Derenberger spun a strange tale at a news conference Thursday. He told of an encounter with a flying saucer and telepathic conversation with its humanlike occupant who promised him he would be contacted again.

" Derenberger said the episode began shortly before 7.30 p.m. Wednesday as he was driving home from Marietta, Ohio, on Interstate 77. He said a 'dark, long object' travelling at about the same speed as his panel truck ' cut in front of my vehicle and continued to travel at some distance sideways.'

"He said the object was charcoal grey in colour, 'apparently made of some kind of metal and shaped something like an old kerosene lamp globe, having a flat bottom and a domelike top.'

" There were no visible lights on the object, Derenberger said, but it emitted a ' fluttering, soft noise ' as it moved along ' eight to ten inches above the pavement, blocked the highway and finally stopped.'

" From this point, Derenberger said, a door in the side of the UFO opened, much like a car door, and a ' man ' stepped out. The man approached Derenberger's truck, and told him to roll down the window. During the following ' five to ten minute conversation,' the saucer occupant communicated with Derenberger through ' thought waves or mental telepathy.' His lips were closed and he smiled constantly, Derenberger said. He described the occupant as six feet tall, 35 to 40 years old ' by our standards,' weighing 185 pounds, with dark hair slicked back, and a dark complexion. He wore a ' short topcoat, with trousers visible below the coat, and a shirt buttoned at the neck.'

" His clothing was ' blue and quite shiny, having a glistening effect.'

" ' Have no fear, we come from a country that is not nearly as powerful as yours. We mean you no harm,' he quoted the individual.

" As the man ' spoke ', Derenberger said the ' saucer ' hovered into a position 50 to 75 feet over the highway. Derenberger said he was asked what the lights were in the distance, and he replied that it was the city of Parkersburg. Derenberger said the man said a similar place in his country was called a ' gathering.'

" Derenberger said the man described himself as a ' searcher,' and called himself by name as ' Cold.'

" Derenberger said the man promised to contact him again, and suggested that he notify the local authorities. The UFO then returned to the scene, and another occupant reached an arm out the door to help his companion back aboard.

MAJORCA (*Continued from Page 19*)

saw has satisfied us that UFOs exist. What we saw was not of this planet, and was at least as large as three of our largest planes put together. The rest is guesswork ! But if we see anything again I shall endeavour to get photographs of it for visual proof."

In a postscript Mr. Huggins added that they had been told by the Whitney Straights that the object was seen by the radar station (American) onMallorca and was **not** identified. It should be remembered, however, that Mr. Huggins' letter was written fourteen days after the Air Commodore's letter to Mr. Creighton.

'The door closed, sounding much like a car door,' Derenberger said, and the UFO burst into the air at 'tremendous speed.'

"Hurrying home, Derenberger said he was shaken. He then telephoned the Parkersburg police and related his story.

"Derenberger, the father of two small children, lives at nearby Mineral Wells. He said he was willing to take a lie detector test. He said should he be contacted again by the 'saucer,' he could think of a 'million questions to ask.' But Wednesday night he found it 'very difficult to talk.'

"As for the return engagement, Derenberger said: 'I think they will, but I hope they don't.'"

The Plasma/UFO Controversy

We feel that the following selection from letters to the editor of *Aviation Week*, which, appeared on November 7, 1966, following the article on the plasma fireball explanation by science writer Philip Klass, may be of interest to readers.

"The article on UFOs in your Oct. 3 (p. 54) issue was the first intelligent explanation of this puzzling phenomenon I have ever seen. Without a doubt, the author has finally come up with the one theory which explains all the characteristics exhibited by these objects.

"It is too bad that the popular press represented by daily newspapers and certain weekly picture and news magazines, will most likely completely ignore this theory. After all, what possibly can be romantic or mysterious about a common old everyday plasma—Myer J. Rosenfield, Cincinnati, Ohio.

"I wish to congratulate Mr. Klass for his article. 'Many UFOs are identified as Plasmas,' because it greatly adds to the UFO mystery. Just recently I was talking to a nice old man who told me the following story: 'Two months ago I saw a flying saucer and I thought I had gone nuts; my wife said I was ready for the funny farm, but the Air Force sergeant stated I was only the victim of a mild delusion. With this, the Air Force consultant disagreed, pointing out the evidence for mental aberration was inconclusive. Then came this man from Harvard who told me I had mistakenly interpreted an abnormal-propagation effect caused by a temperature inversion—but another guy said no, my observation of erratic behaviour pointed to a mass of charged particles attracted to *other objects with unlike charge, repelled by those with the same polarity* and that *it might even advance the understanding of plasma containment for fusion power use.* I still don't know what it is I saw, but I sure got a heckuva vocabulary.' — Jacques Vallee, Mathematician-Analyst, Northwestern University, Evanston, Ill.

"Phillip Klass deserves much credit for his attempt to explain the UFO mystery in a straightforward, scientific manner. Most importantly, he recognises the existence of the UFO phenomenon as something unique and novel instead of some misidentified celestial body or other mistaken object. Although the plasma hypothesis as applied to UFOs is not new, the theory has never been so thoroughly or so carefully elaborated before.

"There are difficulties with 'UFO plasmas' that are not resolved to my satisfaction. Actually, to duplicate the performance and behaviour of UFOs, a naturally occurring plasma would have to have almost impossible characteristics (for a plasma), appearing under a wide variety of situations. Many UFO effects would have to be created by very high intensity plasmas which would be difficult for nature to construct under the conditions required to fully explain UFOs.

"Klass' hypothesis does not adequately account for UFO-connected auto engine and headlight failures. In particular, it does not explain such reliably reported UFO landing cases as the Socorro, N. M. incident where landing gear, landing gear imprints, hull markings, and humanoid figures were observed. (The Socorro object was reported by a policeman with an outstanding record for honesty. The incident is still listed as 'unknown' in Air Force files.)

"Perhaps Klass is partially correct: the UFOs may be extraterrestrial vehicles generating a plasma field.

"In many cases, Klass has made a sincere effort to examine the UFO problem objectively unlike many scientists who have ignored this important subject altogether or ridiculed it to death. It is a step in the right direction.—Walter N. Webb, Member, Panel of Special Advisers, National Investigations Committee on Aerial Phenomena (NICAP) New York, N. Y.

"*The difficulties for the plasma theory are insignificant compared to those required to explain the characteristics and behaviour of UFOs as extraterrestrial space-craft. The physics of plasmas is so complex that scientists have difficulty understanding man-made plasmas in the laboratory where they can be instrumented extensively; so it is not surprising that those produced infrequently by nature in locations where there is no scientific instrumentation, should be far less well understood.*

"*Mr. Webb cites the report of landing gear imprints and humanoid figures for the UFO encounter at Socorro, N. M. But he fails to explain why there have not been imprints and humanoids reported in the hundreds of other similar UFO 'landings'. If, as Mr. Webb suggests, the plasmas are generated by the extraterrestrial visitors themselves, presumably for propulsion, why is it that when the plasma glow disappears at or near the ground, no residual spacecraft is seen?—)*"

Editor [of AVIATION WEEK]

[It was to be expected that the editor of *Aviation Week* would be ill informed on the subject of UFO landings. FLYING SAUCER REVIEW has accordingly sent him a copy of the FSR Special Issue *The Humanoids* in which we have presented some 300 landing reports.—EDITOR.]

(*Continued from Page 28*)

referee your articles much more stringently so that such outrageous conclusions as made in this article are not repeated.

—Edward Fortune, A.R.C.S., B.Sc., Grad.Inst.P., Falmouth Hall, Princes Gardens, London, S.W.7.

Reference 1. MORONEY M. J. *Facts From Figures* Pelican 1964, Page 259.

Reference 2. EILON S. *Industrial Engineering Tables* Van Nostrand 1962, Page 97.

[Comment, by C. Maxwell Cade: *Mr. Fortune is absolutely right; the mathematics in the article in question are wrong. On the other hand, it seems to me that it is ridiculous to attempt to apply a pseudo-scientific analysis to what is essentially a qualitative problem. No amount of calculation alters the puzzling resemblance of the areas. Moreover, my own personal feeling is that for two bodies so similar in general structure and atmosphere (or lack of it) such a resemblance is not really surprising.*]

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