SPANISH ORTHOTENIES IN 1950

by ANTONIO RIBERA

It is nearly three years since our contributor wrote for the Flying Saucer Review. Recently he has published what may well prove to be the standard work in Spanish on the subject of the UFOs.

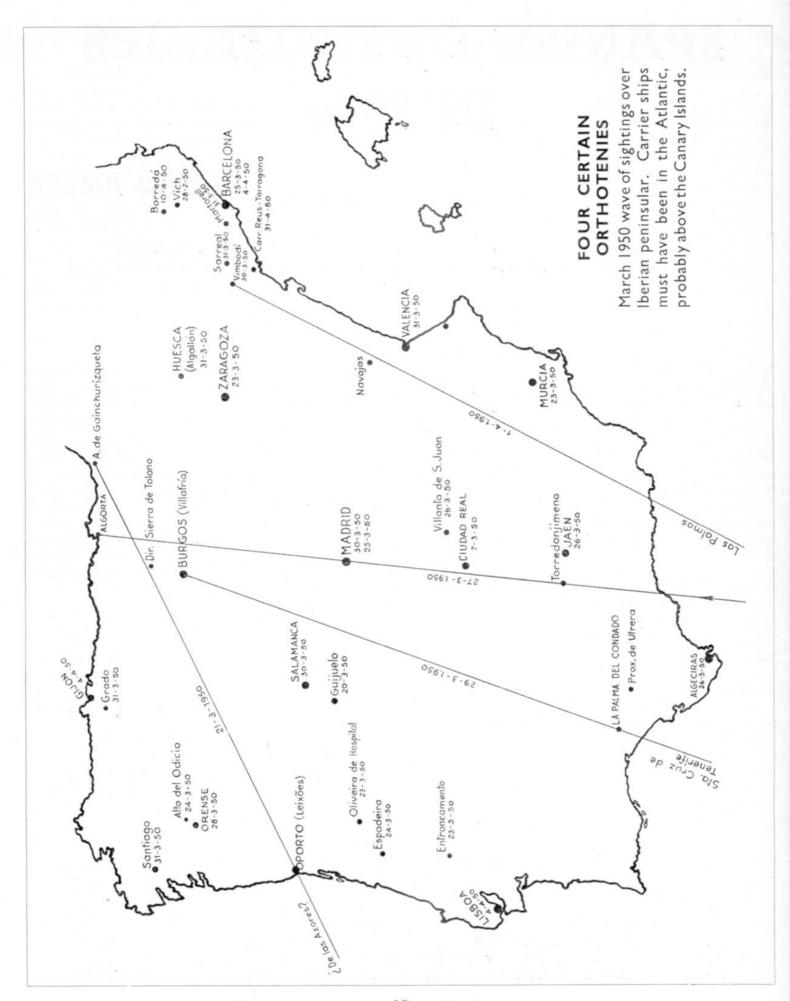
IE are now in a position to reveal that the Iberian Peninsula had its saucer visitation four years earlier than the better-known French incidents reported by Aimé Michel in his book Flying Saucers and the Straight Line Mystery. More exactly, the Iberian Peninsula did not receive the full impact of this 1950 invasion; it was rather situated in the eastern outer rim of it. In a previous article* published in these same pages, I stated that, according to the discoveries made by my countryman Eduardo Buelta, President and founder, with me, of the "Centro de Estudios Interplanetarios" of Barcelona, Spain, the invasions came two months in average after the last Mars opposition. Also, that these invasions, being related to the Mars oppositions, shifted eastwards (about one degree daily). The area so explored has a width of 2,000 kilometres (approximately 1,250 miles) at each side of the meridian-axis.

During the last few years I have conducted intensive research work, reading Spanish newspapers from 1947 onwards by the hundreds. Well, to my surprise, I discovered evidence of an unmistakable visitation in March-April, 1950 (with some sightings continuing into May), centred chiefly in the last days of March, precisely at the time of the Mars opposition. But the most interesting thing is this: according to the calculations made by Buelta, the axis of the 1950 visitation was in mid-Atlantic, mainly in the north section of it. I found evidence, then, of "mother-ships" stationed off the Canary Islands, sending their small reconnaissance units up to the Iberian Peninsula (sightings of March 27, 1950, March 29, 1950, and April 1, 1950). Another sighting (see map) of March 21, 1950, some days earlier, points to a possible "mother-ship" off the Azores. All these sightings, united by a straight line, form perfect orthotenies. I am quite convinced that these four orthotenies are not the only ones which could be traced; however, of the 23 other sightings registered, in some of them we have only two points, and we are unable, therefore, to trace an orthoteny from them. Many of the sightings which occurred were not recorded; others must surely be in provincial newspapers, out of my reach for the moment being. However, I hope to complete this research, reading all of the Spanish press of the time available. It should be remembered that I used only the collections which can be consulted in the Barcelona archives.

For this research, I applied the same method described by Michel, i.e. I placed colour pins on a map at the places where all the sightings occurred. For this, I used the Firestone-Hispania maps (Spain and Portugal), at scale of 1:1,250,000 and 1:500,000.

The Orthotenies

March 27.—Three sightings on a straight line from Torredonjimeno, near Jaén, to the Algorta weather station, near Bilbao (more than 600 kilometres), through Madrid. The Torredonjimeno and Madrid sightings were made very early in the morning; that at the Algorta station was made at 6.30 p.m. In Algorta they saw "an unknown object, eliptical in shape and bluish in colour; from it there emitted a reddish glow." The UFO seen in Torredonjimeno by Manuel Pérez García and Juan Pardo Utrilla (this sighting was reported only in the papers of April 2) was balloon-like, which sometimes changed into an oval shape and



at times looked liked a round disc, clearer in colour. It emitted sparks and its speed was fantastic. In Madrid, there was seen a similar object, around 7 a.m. (Note that the two Torredonjimeno observers were up very early in the morning, on their way to the "Misa de la Aurora," The Dawn Mass.

March 29.—Three sightings on a perfect geodesic line. Santa Cruz de Tenerife (Canary Isles): UFO as a stationary point of light, at a great height over the sea at 9 a.m. La Palma del Condado (Andalusia): A waiter of the Casino of La Palma, Manuel García Plata, saw a UFO at 8.30 a.m. from the terrace of the Casino. Its shape was square! Villafría (near Burgos): This sighting is most important, because of the scientific standing of the observers. These were the chief of the Weather Station, Capt. Ruiz Gómez, a sergeant of Transmissions, and the officer in charge of the Morse station (Villafría is an airfield of the Army). The three observers heard a noise as of an approaching plane, and they saw a UFO coming from the south-south-east, which came over the control tower. Then it bent its course to the east. The observers said that it flew at an altitude of between 500 and 1,000 metres (1,600 ft. to 3,200 ft.); it was not large and its shape resembled a delta plane. Its probable speed was about 1,800 k.p.h. (approximately 1,125 m.p.h.). Capt. Ruiz said that it noticeably slowed down when passing over the control tower, as though to observe it.

April 1.—UFOs seen on a straight line which

links Las Palmas (Canary Isles) with Vimbodi (Tarragona) through Navajas (Castellón).

As to the orthoteny of March 21, it links Barra do Douro and Leixoes, on the north coast of Portugal, with the Altos de Gainchurizqueta, between San Sebastián and Irún, where two youngsters from Irún, coming back from San Sebastián by bicycle, saw "two shining, metalliclooking objects, flying at an enormous height, about 5,000 metres (approximately 16,500 ft.) at 12.30 p.m." An hour earlier, several discs were observed by many people and also by the observers from the Pilots' Tower in Barra do Douro and Leixoes. "No Portuguese fighters tried to intercept those UFOs," the Portuguese authorities later announced. On the same day, in the afternoon, the chemical engineer, Señor Don Francisco B. Nanclares, saw, with several other observers, in Miranda de Ebro a bright object which flew at great speed, leaving a luminous trail, heading for the Sierra de Tolono, between Alava and Rioja.

In my book, which has just been published, Objetos Desconocidos en el Cielo (Unknown Objects in the Skies) I refer to these and to other Spanish sightings, after tracing, in 300 pages, the UFO drama, from Kenneth Arnold to Aimé Michel, and the discoveries made by Plantier, Buelta and myself.

However, all the evidence points to an end to this drama. Will "they" come back again to explore Earth . . . or to land on it? Who knows?

* "UFO Waves Follow a Certain Pattern," FLYING SAUCER REVIEW, May-June, 1959, pp. 12-14.

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We regret to announce that as a result of the recent printing increase we have been obliged to raise our subscription rate from 22s. to 25s. per annum. In 1959, we were able to contain the increase imposed that year, but we are now unable to absorb the rising costs any more.

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THE SEARCH FOR LIFE BEYOND THE EARTH

by P. F. SHARP B.Sc.

The author of this article is a young development chemist with a large industrial concern in the North of England. He graduated at Liverpool University in 1959 with a B.Sc. in chemistry. Mr. Sharp is also a graduate of the Royal Institute of Chemistry. He has been interested in astronomy for a number of years, and when at Liverpool University was Hon. Secretary of the Astronomical Society for two years. It is encouraging to note that the Flying Saucer Review is attracting as readers and contributors a number of younger scientists who, unlike so many of their elders, are quite prepared to take a serious interest in UFOs and their attendant problems.

THEORIES of the origin of planetary systems may be conveniently divided into two groups. One attempts to explain the main features of the solar system by a slow evolutionary process and the other attempts the explanation by some violent mechanism such as the close encounter of our own sun with another star. The former group of theories generally predict that planetary systems will be a common phenomenon throughout the universe, whilst the latter theories predict that planets will occur only rarely.

The Nebular hypothesis

After Newton discovered the law of gravitation it was possible to speculate seriously on the origin of the planets. The theories have swung from favouring the evolutionary type to violent types and back again. The first theory worthy of note is the Kant-Laplace Nebular Hypothesis which was first set down by Kant in 1775 and was discovered independently by Laplace and developed in his Exposition du Système du Monde in 1796. The whole solar system including the sun was supposed to have originated in a condensation of a large, diffuse, rotating cloud of gas. As the cloud condensed its rotation increased and small masses of material were flung from it when the centrifugal force at the edge overcame the gravitational force—these masses of material became the planets. The Nebular Hypothesis remained virtually unchallenged throughout the nineteenth century, but later quantitative examinations of the theory showed that the distribution of angular momentum between the sun and the planets predicted by the theory was in conflict with the observed distribution. Whereas

the sun has 99 per cent. of the total mass of the solar system it possesses only about 2 per cent. of the angular momentum, leaving the planets with the other 98 per cent. On the Nebular Hypothesis the sun would have a considerably faster rotation, and hence angular momentum, than that observed.

Other theories

This failure of the Nebular Hypothesis lead to a series of theories which attempted to explain the angular momentum difficulties by postulating the intervention of another star which either passed close by the sun (Chamberlain and Moulton, Jeans, and Jeffreys theories), or which was once one-half of a binary system with the sun (Lyttleton, Hoyle, and Firsoff theories). The intruding star theories take the general form that the sun was passed closely by another star which tore out of the sun a mass of gases and imparted to these a high angular momentum. The gases gradually condensed to form the planets. Detailed examination of these theories showed that they, too, could not fully account for the angular momentum distribution. However, the distribution can be explained by postulating that the sun was once a member of a binary star, the other component of which donated the gases necessary to form the planets by undergoing a collision with a third star or by becoming a nova or supernova and in that process breaking the gravitational bonds binding it to the sun.

Such theories, however, raise the question of the origin of binary stars themselves. About 40 per cent. of stars are binary systems and the recent discovery of small bodies of mass intermediate between that of a large planet such as Jupiter and that of the sun suggests that there is a continuous gradation of size of binary system components. Thus, speculation of the origin of planetary systems from such a system is only one step down the ladder to the prime origin of

planets.

Spitzer has shown that hot gaseous material ejected by the sun's one-time companion would rapidly dissipate itself in space due to its initial high temperature and pressure. Insufficient gaseous matter would be retained to form the planets. This is supported by recent work on the heat balance of the earth which has been interpreted as evidence that it was formed by cold accretion and not by condensation from hot material.

Another explanation

In 1944 Dr. von Weizsäcker produced a highly developed theory having much in common with the Nebular Hypothesis, but in this case the planets condensed from a gas and dust cloud which was captured by the sun when it passed through a dense interstellar cloud of dust on its journey around the galaxy. This theory as developed by Ter Haar has had a great deal of success. It explains the large angular momentum of the planets as originating from an internal rotation in the cloud of dust captured by the sun. Schmidt has produced a more elegant theory which differs in detail from that of Weizsäcker on the method of condensation of the dust cloud

into planets.

Evidence is accumulating that the formation of planets is tied in very closely with the formation of stars. Workers such as Alfvén have shown mechanisms by which angular momentum could be transferred outward from the cloud of matter condensing to form a star and this could be imparted to planetary bodies or another star to form a planetary system or a binary star. Indeed, Hoyle has shown that the angular momentum of stars should be much higher than that observed unless they had some means of losing some angular momentum. Otto Struve has also pointed out that stars which have a mass of about oneand-a-half times that of the sun or less (about two-thirds of all stars) have a much slower angular rotation than stars of larger mass, indicating that the former may have lost much of their angular momentum by the formation of planets.

We see, then, that recent theory suggests that 66 per cent. of all the stars have planetary systems. Hoyle in his *Nature of the Universe* (1950), where he developes a non-evolutionary theory of

the origin of the planets, suggested that there might be a million planetary systems in our galaxy. In *Frontiers of Astronomy* (1955), where he discussed an evolutionary theory, his estimate was 100,000 million planetary systems in our galaxy.

Given that planetary systems are extremely abundant throughout the universe, what is the probability of life occurring on some other planet? Here again recent scientific research gives us a great deal of information on which to base our

speculations.

Two factors are of supreme importance. First, the lifetime of the parent star as a stable body and, secondly, the probability of finding a planet in the habitable zone around the star. Life has taken about four thousand million years to evolve on the earth and hence we expect that stars which do not remain at a constant brightness for such a period of time will not have life on their planets. It is mainly the stars with large masses (and high angular rotations) which have such short lives as stable emitters and it has been shown above that these are unlikely to have planets anyway.

A necessary limitation

Advanced forms of life are limited to those temperatures at which water is liquid. The size of the zone around a star in which a planet would have a surface temperature in the liquid water range depends on the mass of the star. (The luminosity varies as the fourth power of the mass for main-sequence stars which we are considering). The habitable zone for our solar system extends roughly from the orbit of Venus to that of Mars. For stars of inferior mass than the sun it will become smaller and hence there will be less likelihood of finding a planet within it. There are more stars of smaller mass than the sun than there are larger stars (neglecting those with a rapid rotation), and the smaller the star the longer its life as a stable emitter of radiation; therefore, the total number of planets bearing life revolving round small stars may be greater than those which belong to sun-like stars.

Taking the above considerations into account the stars that seem to be the most favourably endowed for life are main-sequence stars with masses roughly between 0.7 and 1.5 that of the sun. This means that some 10 to 20 thousand million stars in our galaxy have a high probability of being favourable abodes of intelligent

life.

Given that life is probably quite a common phenomenon throughout the galaxy, how can we attempt to detect it positively? Most methods that suggest themselves suffer from the disadvantage that some active co-operation of the life we are searching for is called for. It is rather like looking down a microscope to discover a virus that is expected to be in the field of view but which can only be seen if it waves up at us. This analogy is limited because in it one intelligent being is using a scientific instrument to search for a low form of life. In actual fact as our technology stands today we can hope to communicate only with life represented by a race of beings whose scientific and technological advancement is certainly no less than our own.

The Problem of communication

The only current active method of communication with extra-terrestial life is by the transmission of radio signals to those stars which have a high probability of intelligent life in the hope that they will be detected and replies transmitted back to us. One passive method of detection of intelligences is the reverse of the above method, namely to listen for intelligent radio signals which are either broadcast to us or are the everyday communication signals of the other race. To pursue these further, and other methods of detection of intelligent life beyond the earth, we must consider the possible life cycle of civilisations.

Now, it takes several thousand million years to produce an intelligent life form, but it takes only a few hundred years for a civilisation to proceed from the most primitive means of communication to those which will bridge light-years of space. Hence on the time scale of solar lives a race becomes adept at interstellar communication in a fraction of a second. The number of races using radio communication will depend on the rate at which new races acquire knowledge of radio and also on the longevity of such races at that level of technology. If the longevity is small, then the number of races with which we may communicate will also be small. Mr. Peter Masefield. President of the Royal Aeronautical Society, suggested at a meeting of the U.S. Institute of Aeronautical Science that the reason why we have had no visitors from outer space (he obviously chooses to ignore the flying saucers) was because when a race had evolved to the point where it had solved the mysteries of nuclear fission it proceeded to blow itself to smithereens. Moreover, if we take the more optimistic view that races do not blow themselves up on reaching our stage of development, we may expect to find a considerable number of races more advanced than ourselves. This raises the possibility that in the past a more advanced race might have attempted to communicate with us, not only by radio, but by more tangible means. In the distant past, perhaps before man appeared on the earth, a space probe, possibly "manned," might have surveyed the earth. The most unambiguous indication of such a visit would be the discovery of an artifact out of its geological context For example, the finding of a lens, screw or similar object in a bed of clay, gravel or coal, which by examination of the other objects found in the same stratum could be shown to ante-date, if not man himself, that period in which man made such things, would clearly indicate the type of visit envisaged. The polar snows might also preserve evidence of this nature as might the surface of the moon which changes very slowly with time.

Charles Fort collected evidence of many strange occurrences which might best be explained starting from the postulate that there is intelligent life in space. One interesting case mentioned by Fort which has subsequently received some attention from Jessup and others is that of the Gurlt "meteorite." This was a strange lump of iron of regular shape found in a coal bed laid down in Tertiary times in Austria. The issue of Nature of November 11, 1886, reports:

"At a recent meeting of the Niederrheinische Gesellschaft für Natur unde Heilkunde at Bonn, Dr. Gurlt described a fossil meteorite found in a block of Tertiary coal, and now in the Salzburg Museum. He said it belonged to the group of meteoric irons, and was taken from a block of coal in a manufactory in Lower Austria. It was examined by various specialists, who assigned different origins to it. Some believed it to be a meteorite; others, an artificial production; others, again, thought it was a meteorite modified by the hand of man. Dr. Gurlt, however, came to the conclusion, after a careful examination, that there is no ground for believing in the intervention of any human agency. In form, the mass is almost a cube, two opposite faces being rounded and the four others being made smaller by these roundings. A deep incision runs all round the cube. The faces and the incision bear such characteristic traces of meteoric iron as to exclude the notion of the mass being the work of man. The iron is covered with a thin layer of oxide; it is 67mm. high, 67mm. broad and 47mm. at the thickest part. It weighs 785 grammes, and its specific gravity is 7.75; it is as hard as steel, and it contains, as is generally the case, besides carbon, a small quantity of nickel. A quantitative analysis has not yet been made. This meteorite resembles the celebrated meteoric masses of Saint Catherine in Brazil and Branau in Bohemia, discovered in 1847, but is much older and belongs to the Tertiary epoch."

One can forgive Dr. Gurlt for doubting the intervention of human agency, especially as he was reporting in 1886 and a scientist must preserve a sceptical attitude. There were other reports of the object in the scientific journals of the time. The account in Comptes Rendus is the only one that seems to add anything of importance to the account in Nature. In Comptes Rendus we read that "une section polie ne présente plus les figures de Widmanstätten." Now a Widmanstätten figure is the name given to the pattern produced on etching nickel-iron meteorites that have an octahedral crystal structure. This type of nickel-iron comprises 75 per cent. of all nickel-irons, hence the absence of the Widmanstatten figures shows that if the object is meteoric it is at any rate one of the less common types. One active step we could undertake today is to investigate further the Gurlt object and others of the same ilk.

The Siberian "meteorite" of 1908 has many puzzling features which have led to it being described as a comet, a meteorite composed of anti-matter as well as a nuclear-powered space ship. Reports of further work on this enigma will be of interest not only to meteoricists but to all interested in the possibility of life beyond the

earth.

Recently it has been suggested by the Russian scientist Shklovsky that the variations in the orbit of Phobos, one of the Martian moons, is best explained by postulating that it is hollow—an artificial body in fact. Again, any future developments of this matter will be of the greatest importance to those interested in extra-terrestial life.

To return to the radio signal method of detection: from considerations of the interference effects of cosmic noise it has been decided that the best frequencies for long-distance communication in space are those above 1,000 mc./sec. There is still a wide bandwidth which we would have to monitor to detect communication signals of another race. However, Morrison and Cocconi, of Cornell University, have pointed out that any race wishing to contact us would probably pick out the 1,420 mc./sec. frequency. This is the frequency of "neutral" hydrogen in space—the 21cm. hydrogen line—which enables radio astronomers to plot the distribution of hydrogen gas clouds in space. It also complies with the requirement of being above 1,000 mc./sec. to minimise cosmic noise static interference.

It seems reasonable that the race attempting to contact us would use the wavelength on which races at our stage of technology first uses high sensitivity radio telescopes of narrow bandwidth. This is the 21cm, wavelength.

This reasoning has led Dr. F. D. Drake, of the National Radioastronomy Observatory at Green Bank in West Virginia, to listen for signals at 21cm. wavelength from Tau Ceti and Epsilon Eridani, which are the nearest stars which comply with the conditions, given above, and which lead us to believe that there is a high probability of life existing there. This listening programme with the 85-ft. radio-telescope is called Project Ozma. After 150 hours of listening there has been no evidence of strong signals from these stars.

It may be hundreds of years before a search of the Project Ozma kind is rewarded with the first sounds that will tell us conclusively that we are not alone in the universe The words that all involved in this work should have ingrained in their hearts are "Seek and ye shall find."

Sighting reports . . .

ENGLAND, NORTHERN IRELAND, AUSTRALIA, TRISTAN DA CUNHA, SOUTHERN RHODESIA, BRITISH GUIANA, THE U.S.A.

. . . in this issue

DID A SCOUT SHIP TOUCH DOWN ON THE ISLE OF WIGHT?

by Leonard G. Cramp

PERHAPS the fact that it is an island may explain why the Isle of Wight has a UFO sighting once every few months or so, particularly off the southern coast. But certainly there have been an increased number of sightings lately for some mysterious reason or another. So much so, in fact, that a news commentary on the Southern TV concluded with the comment: "So if there are such things as flying saucers, it would appear they are watching the Isle of Wight. I wonder why?"

Even so it is regrettable that one of the most exciting local reports so far has been neglected by

the national dailies.

Living so close to hand, it was natural for me to seek an interview with the two witnesses who claimed this unusual sighting. There are, of course, other interesting aspects of the case, but for the sake of brevity we must keep to the salient facts. From the outset I found Mrs. Smith and her daughter, Mrs. Taylor, of Ryde, charming and extremely helpful people. At our first, and at a subsequent meeting to make a tape recording, both these ladies gave me a strong impression of sincerity and complete honesty.

Fortunately, Mrs. Taylor proved to be an excellent artist and she has been able to record a good

impression of the vehicle she saw.

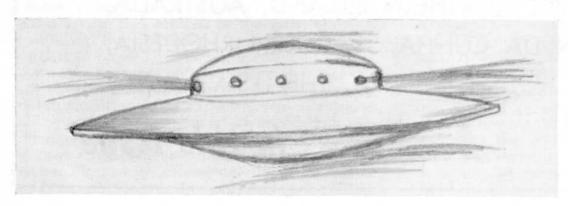
Several people in the vicinity of Ryde had seen UFOs, but it was a Commander Mole, of Seaview, who was interviewed on the Southern Television. As a result of this Mrs. Smith telephoned Commander Mole to tell him she was glad someone else had seen an object, for it confirmed her own experience. Commander Mole was very impressed by Mrs. Smith's description and suggested she tell someone in authority about it. Fearing ridicule, Mrs. Smith, however, did not contact anyone and it was Commander Mole who informed the press for her. Otherwise it seems likely that once more a valuable piece of evidence would have gone unrecorded.

On the night of July 3 Mrs. Smith visited her daughter and at approximately 12.15 a.m. they went up to the roof above Mrs. Taylor's flat to bring in some baby linen off the line. Being interested in ships (Mrs. Taylor's husband is a sailor), they had automatically glanced out to sea from the excellent viewpoint the flat roof offers.

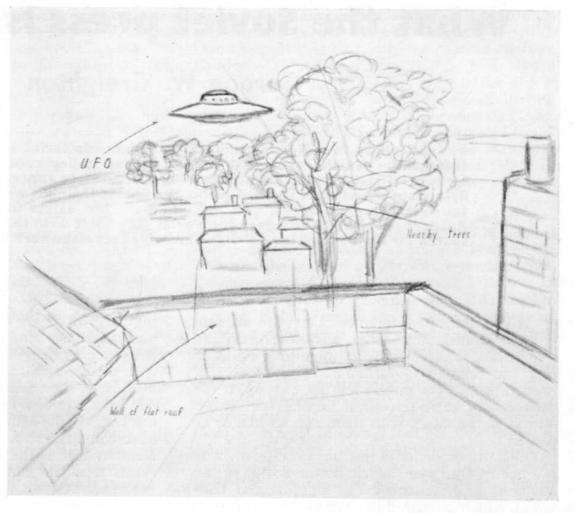
Mrs. Smith had spotted the lights of what she took at first glance to be a ship some distance away and at eye level, but her daughter pointed out that the lights could hardly be those of a ship

for they were in the air.

The two women watched fascinated for a few moments. Then they could make out five distinct lights in a row. Slowly the lights seemed to get nearer. Then they could make out yet another light above the five. Still the lights got nearer, until the object which was emitting them itself became visible. Mrs. Smith had said to her daughter: "Whatever is it? It looks like a hovercraft." Up till then the UFO had been steady at eye level, presenting a side elevation. Then it had



Original sketch by Mrs. Taylor, 11/7/61.



Original sketch by Mrs. Taylor, 11/7/61.

tilted, revealing something of its plan form. The likeness to a hovercraft, which Mrs. Smith had seen several times, is quite understandable, except that this one was completely silent.

Still the UFO came closer until Mrs. Taylor backed down the stairs with apprehension. "We thought it was coming straight for us," she said. She also described it later as being like a hovercraft (circular in shape) with five porthole lights which emitted rays of orange-coloured light. There was an orange-coloured diffused light on the top and the whole base appeared to glow with an orange light, which was reflected by the trees only (in the writer's estimation) some sixty feet below.

Suddenly the UFO darted off and upward in the direction from which it had come. The press had quoted Mrs. Smith as saying "faster than any jet." In fact, the speed made her feel a bit dizzy. One moment the vehicle was there, the next instant it was rapidly fading away in the distance "like a shooting star."

After this dramatic departure, during which there was still no sound, a glowing ring of light was seen to occupy the area where the UFO had been. Mrs. Smith described it as looking like a smoke ring which gradually spread out rising into the air as it did so. Having persisted for some five minutes or so, it had finally dispersed into a glow of light.

Neither of the witnesses had studied the subject of flying saucers and neither had seen photo-

graphs of George Adamski's scout ship. The writer took great care not to help them in

any way, yet in the presence of an independent witness Mrs. Taylor did a sketch of the UFO and it was exactly like a scout ship. Later when I produced the photographs of the Darbishire and Adamski scout ship, they unhesitantly and easily identified it, saying it looked more like the Darbishire photographs before it tilted, then, when it tilted, it looked exactly like the Adamski scout ship photograph.

I am able to add that I and others are ladies unquestionably that these observed a scout ship at fairly close range, less than a quarter of a mile away from where they

were.

That same evening, several miles away and a little earlier, a friend of mine saw bright lights in a remote field, which were preceded by a strange and very local whirlwind.

What the Soviet press is saying

by Gordon W. Creighton

Mr. Creighton, our Russian expert, continues his series of articles and translations which reveal the official Soviet policy concerning extraterrestrial civilisations. It is becoming increasingly apparent that while flying saucers, as such, are still taboo, the Soviet Union is willing to accept the fact that intelligent, and even human, life exists in outer space. Readers may like to compare the Soviet viewpoint with the article "The search for life beyond the earth "which appears elsewhere in this issue.

HAVE indicated, in connection with my previous translations from Soviet papers and iournals, what I think is mounting evidence that the Russian Government is systematically preparing its own public for the day when the existence of extra-terrestrial intelligences is admitted, and contact with them can no longer be denied.

The latest evidence of this sort to come my way is a twenty-four page article by the Soviet writer, Vladimir Lvov, entitled The Cosmos and Ourselves, which appeared in Zvezda (Star) for May, 1961. This important journal, published monthly in Leningrad, is the official organ of the Union

of Writers of the U.S.S.R.

The article is preceded by the full text of the Soviet Government's communique of April 12 about Yuri Gagarin's successful space-flight on the same day, and by a series of poems about Man's conquest of Space. The main points of interest to us in the article I have roughly sum-

marised as follows:

After discussing Man's achievements from Columbus to Gagarin, and Man's past speculations about the Universe, the author says that the time has now come to face boldly the problem of whether or not it is inevitable that we shall make contact with intelligent denizens of other worlds. The answer to this is, he says, definitely yes, because matter everywhere throughout the Universe is the same, obeys the same laws, and goes through the same stages of development, producing life wherever conditions are favourable, and life culminating inevitably—again given the right circumstances—in the highest and most complex form of living matter, namely the substance of the human brain and mind.

"Although there may well prove to be no

highly evolved life on the other planets of our own Solar System, this is of no consequence, inasmuch as the American astronomer Struve has made a discovery which has greatly astonished the scientists. He has been making a careful study of a large number of the stars in our Galaxy (the Milky Way) and has found that approximately half of them are revolving fifty times as fast as the others, from which he deduces that the slower ones are stars having planetary systems, and that consequently half the stars of the Milky Way possess planets. Not all types of stars, of course, provide the necessary conditions for the protracted evolution of higher forms of life. Assuming that the basic requirement for the development of higher life in a planetary system is a steady condition of the parent sun, and assuming that it has taken from 3½ to 4 thousand million years for life on our own planet to have evolved from the albumen molecule to Man, scientists have made careful calculations and have concluded that in fact some 5 per cent. or 6 per cent. of the stars of the Milky Way are of the right type; i.e. 5 per cent. or 6 per cent. of some 200,000,000,000 suns. This would mean some 10,000,000,000 or 12,000,000,000 humanities like our own merely within the limits of our own Galaxy.

And where will these humanities be found? Scientists are at present concentrating a great deal of their attention upon the stars Epsilon Eridani, Epsilon Pavonis, and Tau Ceti, all three of which are distant from us about eleven light-years, and are of approximately the same size and brightness as our own sun. It may well be that on the planets around these three stars there are humanities like our own, and, in that case, making contact with them is merely a question of time. Among them there will certainly be 'Older Brothers'—civilisations and astronomer, Dr. Hermann Oberth, in which

immensely in advance of our own.

The author mentions an interesting science fiction novel published recently by another Soviet writer. This is The Nebula of Andromeda, by Ivan Antonovich Efremov, in which Efremov imagines the existence of a "Great Circle" or confederation of civilisations in the Cosmos. Now, of course, as the author of the article says, this sort of thing is only "science fiction," and yet today, only three years after the appearance of Efremov's novel, the radioastronomers of our earth are engaged in a serious project which may well be called "The Watch for the Great Circle." This question of the radio-signals from other "islands of intelligence" in Space is today an entirely respectable subject for serious speculation and research. The author quotes the recent article by the British radio-physics expert, Dr. Bracewell, which appeared in *Nature*, and emphasises Dr. Bracewell's statement that if advanced beings exist elsewhere and wish to contact us or study us, their first step would be (just as ours would be) to send automatic devices, filled with instruments, into our solar system, and that indeed, to use Dr. Bracewell's own words, "the possibility is not excluded that such machines are already operating in our solar system and sending out their radio-signals in code.'

I think that I have quoted enough from this article in the Soviet journal Zvezda for readers of the flying saucer review to form their own opinion as to whether the Russian Government is already possessed of momentous information and is wisely preparing its public for the day when the news breaks. It must always be borne in mind that everything printed in Kussia is subjected beforehand to the most careful scrutiny, every possible angle being weighed. Straight science fiction is today, of course, a recognised genre in Russia as it is elsewhere, but everything published there on the subject of Space or Space-Travel has to be vetted just as carefully as material of a political nature. There is no room in Russia for the individual whimsy or the private view. If such articles as this have appeared in many serious journals and newspapers—and they cannot conceivably be termed science fiction—it must unquestionably be because the Soviet authorities have their reasons for approving of them. In a subsequent issue of the REVIEW I will give further evidence of the same sort.

It is worth noting that on page 192 of his latest book, *Flying Saucers*; *Top Secret*, Major Donald Keyhoe says that he is in possession of a letter and astronomer, Dr. Hermann Oberth, in which Oberth states that he is sure the saucers are from Epsilon Eridani and Tau Ceti. The signed original of this letter is stated to be in the files of Keyhoe's organisation NICAP (National Investigations Committee on Aerial Phenomena). And, on pages 257-8 Keyhoe mentions "Project Ozma," being carried out at the new radio-astronomy observatory at Green Bank, West Virginia (America's "Jodrell Bank"), and he also mentions significant announcement about "Project Ozma" by Dr. Otto Struve, director of this new observatory which was to be operated by several universities for the National Science Foundation. This Dr. Struve is, of course, the American scientist Struve mentioned in the Soviet article from which I have given excerpts above. As for Dr. Herman Oberth, we all know that he was saying openly, ten years ago, that the saucers were from outer space, and from outside our own solar system. Since then he has been notably silent, no doubt because he had in the meantime become an employee of the American Government and was consequently no longer free to talk so openly. I think I am right in saying that Dr. Oberth finally concluded his work for the American Government last year and returned to his native Germany to live there in retirement. He is therefore no longer on the official payroll, and I submit that, if Dr. Oberth has now told Keyhoe that he "feels sure' the saucers are from Epsilon Eridani and Tau Ceti, then we can take that statement to be correct. Do not all these clues, from both the U.S.A. and the U.S.S.R., point to the simple conclusion that the Governments of these two countries do know where the saucers come from, namely Epsilon Eridani and Tau Ceti, eleven light-years distant from us?

Another clue

Incidentally, according to Keyhoe, Oberth also told him in this letter that some of the spacetravellers from Epsilon Eridani or Tau Ceti went back home in 1955 to report on our civilisation

and get new orders!

Perhaps there is another valuable clue here. In my article "Unidentified Satellites," in the issue of the REVIEW for January-February, 1961, the various reports which I had gathered together only referred to one "unknown satellite" present in our skies in 1960, whereas Clyde Tombaugh, as will be recalled, was said to have found *two* of them in 1953. If Hermann Oberth now says that some of them went home in 1955 to report on us,

(Continued on page 3 of cover)

THE EAGLE RIVER INCIDENT

The U.S. Air Force comments

The pressure of public phase obliged the National Investigations Committee (NICAP) of Washington to publish in its Investigator for July-August a more detailed account of the landing and contact reported by Joe Simonton on April 18 (see FLYING SAUCER REVIEW July-August for full story). Also, it has admitted that one of the three cakes alleged to have been handed to Simonton by the occupants of the saucer has been received. NICAP reports that a full analysis would be too costly to undertake.

Dr. J. A. Hyneck, speaking for the Air Force, however, believes that there is "no question that Mr. Simonton felt that his contact had been a real experience.' According to Fate magazine for August, the Air Force feels that Joe Simonton's visitors present a good example of a saucer contact case and, as a result, a complete investigation was begun. In addition to Dr. Hyneck, Major Robert Friend, also representing the Aerospace Technical Intelligence Center, and an officer from the K. I. Sawyer A.F.B. of Gwinn, Michigan, also investigated. These investigators, by the way, have indicated that they realise that Joe Simonton will be subjected to ridicule from some sources, but the Air Force hopes that this will not prevent qualified and competent witnesses from making further reports of saucer sightings.

This report from Fate magazine would seem to be contradicted in a letter dated September 6 sent from the Department of the Air Force, Washington to one of our readers, Mr. Ronald W. J. Anstee of Montreal, Canada. (Mr. Anstee had written a num-

ber of letters on the subject of flying saucers to the authorities.) The Air Force's reply of September 6 gives the analysis of the cake as follows: "The cake was composed of hydrogenated fat, starch, buckwheat hulls, sova bean hulls, wheat bran, Bacteria radiation readings were normal for this material. Cheminfra - red and destructive type tests were run on this material. The Food and Drug laboratory of the U.S. Department of Health, Education and Welfare concluded that the material was an ordinary pancake of terrestrial origin."

What appear to us to be of even greater significance in this letter is an opening paragraph which comments: "You persist by insisting that objects under the intelligent control of extraterrestrial beings have visted the earth. May I reiterate to you that the Air Force has never denied the existence of intelligent life on other planets. After fourteen years of investigation there has been no evidence that proved or tended to prove that such a con-

tention as you put forth is true." What the spokesman for the Air Force on this occasion says may be an honest answer. The problem that remains, however, is who decides what constitutes proof. Those of us who have studied this subject for as long as the U.S. Air Force have come to other conclusions, but we might have to be doubly cautious if we were speaking on behalf of a public authority and we would define "proof" much more stringently. Our real quarrel with the authorities is not over the question of proof, but over the matter of the treatment of the evidence. The attitude of the authoritieson both sides of the Atlantichas been to distort the evidence by issuing palpably false interpretations of what has been clearly seen in the skies and, on occasion, on the ground. The Air Forces have tended to thwart a satisfactory solution of the mystery and at the same time to complain that they have no proof! Major William Coleman, who wrote the letter from which we have quoted, has practically admitted in his letter that the inter-planetary theory has been considered and never denied. Let us, at this stage, campaign for a fair hearing of the evidence: the proof will then look after itself.

Footnote. One American saucer magazine, prior to the disclosure of the analysis above, suggested that if the cake alleged to have been given to Mr. Simonton proved to be of terrestrial composition then the whole story would have "proved" to have been a fake. Unfortunately, the position is not quite as simple as all that: there is an alternative hypothesis and that is that the cake could have been made on a planet where conditions are almost exactly similar to those on the earth. Indeed, this may be one of the obstacles in the way of gaining a wide acceptance of the extraterrestrial origin of the saucers. Even if concrete evidence should be left behind in the form of metal, nothing remarkable might be discovered in our laboratories. All that can reasonably be stated is that if Mr. Simonton is a hoaxer he was very unwise to part with his cake without making certain that it contained something of a startling nature. Nothing, in fact, has been "proved" either way.

A PLEA FOR THE TRUTH

A Professor writes to THE TIMES

N August 16, John Jewkes, Professor of Economic Organisation at Oxford University, wrote a letter to the London Times. Although it does not mention flying saucers, the

letter is worth quoting in full:

The great achievements of the Russians in space flight and their brilliant supporting propaganda are rapidly building up among western people, especially among the young, the myth of omnipotence. 'The Russians can do anything they want to do.

Although this idea is palpably untrue, for in industry as a whole Russian effort falls far behind that in a number of western countries, yet it continues to spread. I believe this is partly because we are baffled as to the cause of Russian

success.

Fearful of what remains unexplained, we are in danger of losing confidence in our own institutions and being drawn toward that final, fatal belief that science and technology flourish best under totalitarian governments. Would it not check the growing pessimism if the people of the western world were told frankly by their Governments, and even at the risk of revealing what may be regarded as military secrets, everything that is known about this case?

"For example, why can the Russians toss into space weights so much greater than anyone else? Have they made one of those accidental discoveries, common to nearly all countries—some new propellant, metal or the like—the exact

nature of which they have for the time being been able to keep secret and which has given them a lead? Or is success here merely a matter of trying everything at once, of spending money and diverting scientists and technologists from other interests?

"Western Governments have always had one great advantage over those behind the Iron Curtain: they can afford to tell people the worst. And in this instance, since the worst may be not nearly so frightening as so many people are beginning to think, the case for utter frankness is doubly

strong.

This letter is important because it stresses the danger of overdoing secrecy in the name of security and it might just as well have been written about the Government's attitude to flying saucers which also got caught up in the general and ever-increasing censorship. Lady Chatterley and her gamekeeper friend are allowed to say what they like in public, but "flying saucers" have become the modern dirty words.

While we would like to hear whatever is known about Russia's achievements in space and how they were accomplished, we wonder if the western powers have ever thought that by releasing what they must know about UFOs they could destroy overnight the propaganda value attaching itself to Russia's lead in space. The fact that Russia has gone round and round instead of merely up and down becomes insignificant in view of what other races have already achieved.

venus calling earth?

Venus calling earth?

The London Daily Express on July 21 carried the following story contributed by Chapman Pincher, ex-sceptic:

"Radio signals which could possibly have been made by some being on the planet Venus—some being trying to get in touch with Earth—are reported by a scientist.

"The signals resemble those from a radiotelegraph station, says Dr. John D. Kraus, of the Radio Observatory, Ohio State University, U.S., in the journal Nature.

"Radio waves like the atmospherics created during thunderstorms have previously been detected from Venus, which is the nearest planet to the Earth—about 36,000,000 miles away.

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The London Daily Express on July 21 carried the following story contributed by Chapman Pincher, ex-sceptic:

"Most scientists believe that there must be some natural explanation for the strange signals.

"For astronomers generally are satisfied that the choking atmosphere of Venus makes it impossible for intelligent beings to live there.

"But it is certainly a turn-up for those who believe in flying saucers," one astronomer said last night."

We do not know how many astronomers still believe that Venus has a choking atmosphere, but the other point of view was admirably stated by V. A. Firsoff in our July-August issue.

BOOK REVIEW

FLYING Saucers Farewell by George Adamski. (Abelard-Schuman Inc., New York).

This book is in three parts: the first reviews the author's experiences with his acquaintances from Venus, Mars and Saturn and includes new descriptions of the electromagnetic propulsion of spacecraft and a diagram of the solar system showing three as yet unknown planets beyond Pluto as well as a second belt of asteroids, with a description of the function of these belts; the second relates to his world tour in 1959, in his opinion interrupted by the hostile influence of the Silence Group, and the third reproduces a brochure, brought up-to-date, which he published in 1937 entitled Satan, Man of the Hour.

Adamski has done more than any individual to publicise flying saucers and we have no reason to think that he has done this for personal gain. His first book, which was incorporated in Flying Saucers Have Landed went round the world and so did the author, lecturing by invitation only, after interest had been further stimulated by his second book Inside the Space Ships. His photographs of spacecraft are still the best available to the public and they have independent corroboration by photographs others have taken and by thousands of sightings; although it should be remembered that, of the several types of craft, he has encountered only the three-ball landing gear scout-craft and the cigar-shaped carrier ships.

Contact claims

This having been said and our indebtedness to Adamski acknowledged, it must be admitted that many readers have been unable to accept everything he has asserted. Somewhere along the line, they feel, he abandoned fact for fiction. Moreover, he does not

appear to be alone in this: others who began by claiming contacts with flying saucer occupants under reasonable circumstances have gone on to romance wildly

or to preach to us.

Such developments may not be as unaccountable as they seem if the people from other planets have, as one would expect them to have, a civilisation very different from ours upon earth. Here, people have been brain-washed by contact with another political system; how much more upsetting would be the effect of the mental adjustment resulting from even a brief exchange with highly intelligent members of another civilisation? It must be unbalancing, to say the least.

Different accounts

There is an opening for innocent departure from the truth, as it is understood in normal life. Even as witnesses to any incident notice different things and sometimes contradict one another, so can those who listen to an account subsequently write down different versions of what they heard. Each person hears most readily that which is familiar to him or what he wishes to hear. There is no reason to think that communication by telepathy is any more accurate than by word of mouth; indeed, it may give greater opportunity for misinterpretation, what is thus received being the more easily altered to fit preconceived opinions.

Adamski became a controversial figure chiefly because of the suspicion that his aim is to put across a philosophy which, as a lifelong student and a teacher of universal laws, he feels can save the world. This is the message of brotherhood given in his second book, which combines factual description of trips in spacecraft with accounts of conversations which have a reverential and

dream-like quality.

His "brothers" are no casual visitors to this planet, landing to eat their sandwiches on a sunny hilltop, asking for a jug of water as recently in Milwaukee, or looking for a sweetshop as reported earlier this year from Russia. They chose him to give a message to humanity. Although the message may be couched in terms of Adamski's own philosophy, the main theme of danger from nuclear explosions is to be found in the briefer accounts given by others who have met people from space.

Is civilisation in danger? Mr. Kruschev has said, "We are spending huge sums of money on rockets and atom bombs and they are not for slicing sausages."

His scientists had told him they could make a bomb with the power of 100 m. tons of T.N.T. and had said they could make a rocket to lift it. "That is a picture of the future," he said.

A strange story

In that strange article "Son of the Sun," first published in 1947 in Fantastic Stories and reprinted in FLYING SAUCER REVIEW, Vol 4. No. 6. (November-December 1958) is written: "You have lately achieved the means of destroying yourselves. Do not be hasty in your self-congratulation. Yours is not the first civilisation to have achieved—and used—such means. Yours will not be the first civilisation to be offered the means of preventing that destruction and proceeding, in the full glory of its accumulated knowledge, to establish an era of enlightenment upon the earth."

"However, if you do accept the means offered you, and if you do establish such a 'millennium' upon the basis of your present accomplishments, yours will be the first civilisation to do so"...

If you do fail, as other civilisations have failed, we will see your descendants wearing wiring diagrams for simple machines as amulets, expecting the diagrams to do what their forefather were taught the completed article would accomplish."

Must humanity emerge from the caves in centuries to come and grow through tribes, clans and feudal kingdoms into nations

again—to what end?

One may be excused a brief feeling of resentment against the "brothers" who seem to pass by on the other side, but what should they do? The worst has not happened yet and it is for us on earth to say whether or not it shall. As for these people of other planets, earthmen persist in ignoring both the possibility and the indications they continue to give of their existence: how, then, could one claim that they ought to be neighbourly? If we do, we risk the condemnation deserved by those who say and do not. There is no scope for intervention in our affairs by people who do not enter into our lives. Among Christians few are missionaries; however, these come to bring good news.

The symbols

We have never been satisfied that any constructive purpose is served by the strange symbols in the footprints of the visiting Venusian in Flying Saucers Have Landed and, in the present book, Adamski confesses he is unable to give a complete explanation of them: the various explanations he has received from readers bear no relation to one another and include a rearrangement of the symbols to produce a diagram of a scoutship. No more are we impressed by the ideographs that the author has privately shown as representing Venusian writing,

which resemble Chinese characters.

In Inside the Space Ships Orthon says ". . . the messages I gave you were of a universal character. We knew that although the understanding of such writings was buried with civilisations that were lost long ago, there are a few people scattered about your present world who would be able to translate them. With such translations only the determinedly incredulous can still refuse to Nine years believe." later Adamski cannot give out the translation and those who believe in the existence of visitors from other plants do so in spite of the footprints.

Problem of the past

Do we realise, on earth, that our history is short; that we have a long pre-history including many civilisations, some indicated by monuments and markings both durable and gigantic, of purpose unknown to us? We believe in progress, as does Adamski and his space brothers, and we see that machinery can lift ancient Egyptian rock hewn temples above the flood and that the Chinese will replace their ideographs by alphabetical script in order to keep pace with the advance of civilisation, of which the achievements in raising the standard of life for mankind exceed anything previously known or indicated. What authority is there in the past for the future? It is only a footprint in the sand of time.

Does the dust of ancient philosophies stir with the coming anew of the spaceships and old rhyme come to mind?:

"The man in the moon came down, they say, And asked his way to Norwich;* They told him South, but he burnt his mouth

By eating cold pease porridge." That may be crude and degenerate in comparison with Homer's Odyssey, but what proof is there that any legend — ancient or modern—is other than a work of the human imagination?

Are flying saucers radar trackings, films, pieces of metal and all -themselves just that? Let us, too, be philosophical for a moment: If so, then they are an effect of developing human consciousness and, provided that we have wisdom to resist destructive tendencies on the way, we shall see more of them as our thoughts reach out in the universe and encounter manifestations of intelligence in forms we can comprehend. Today shadows, tomorrow the light may shine upon them. The light alone is substance and two thousand years ago we were given the Way.

In conclusion

Adamski concludes this, his third book. "My preliminary studies, which began with the advent of flying saucers, have now been completed. Of course, this does not mean that I intend to abandon the subject, but it does mean that a new programme of greater intellectual expansion, along technical and philosophical lines, will be carried out by myself and my associates."

We do not say farewell to flying saucers in favour of any philosophy. We are interested in them, interested in their makers and in their occupants; and we

remain

Our Reception Committee * Where, at time of writing, two thousand scientists were assembled for the 123rd annual meeting of the

British Association for the Advancement of Science.

World round-up

of news and comment about recent sightings

ENGLAND: Lord Montgomery glimpses the obvious

The London Evening Standard on August 11 carried the follow-ing report: "The chance that Russia might put a hydrogen bomb rather than a cosmonaut into their next satellite causes no new flutter of alarm at NATO Supreme Headquarters at Paris. I don't say they necessarily have the solution. But at least the problem was put to them, in all its stark dreadfulness, back in 1957—two years before the first sputnik was launched. The military prophet was Field Marshall Lord Montgomery, then NATO Supreme Commander.

At a highly secret conference of the most senior officers, Lord Montgomery was asked to set a hypothetical but possible military problem. He then asked startled generals to imagine a Russian satellite carrying a hydrogen bomb circling the earth, able to re-enter the atmosphere, and explode at any given spot. There were many, I gather, who thought at the time that his imagination had run riot."

Military reputations for sagacity must be easily won. To call Lord Montgomery's imagination riotous by this example of his foresight is enough to cause alarm and despondency in the western world. If those responsible for our security did not recognise in 1957, only four years ago, that man was on the threshold of space then they were unfitted for the posts they held. And if they did not recognise that human nature would attempt to take its powers of destruction with it, then all the assembled generals must have been pur-

Before we are too hard on the generals, however, we would like to make an exception of one who may well have been in Lord Montgomery's audience. General L. M. Chassin was, in 1957, the Co-ordinator of Air Defence for NATO in Central Europe. It was General Chassin who wrote the courageous and perceptive introduction to Aimé Michel's Flying Saucers and the Straight Line Mystery. He, probably alone of that company of generals, must have realised that, whatever our plans for outer space might be, there were others ahead of us with intelligences greater than ours.

Barrow-in-Furness: Pink objects

The North Western Evening Mail reported in its August 17 issue: "A very mystified Mr. J. McPoland of 12 Wordsworth Street, Barrow, told me yesterday that he had seen three mysterious pink objects flashing across the night sky on Tuesday.

'I was just going to lock the backyard door, said Mr. McPoland, when I got the shock of my life, there were three pink objects moving at an incredible speed across the sky.

'They were only visible for about four seconds,' he said, 'but they resembled inverted saucers.' Mr. McPoland said ever since various nations have been launching sputniks he had got into the habit of looking into the night sky to see if he could see them.

'The objects, which I took to be flying saucers. were travelling in a straight line from the Northwest to the South-east,' said Mr. McPoland. 'And they were an equal distance from each other.'

"A spokesman at the Air Ministry's Meteorological Office, Preston, said that they could not have been weather balloons as there were none in the vicinity. However, they did comply with the wind drift that was prevalent in the area last night,' he said, but he assured me that they were nothing to do with the Meteorological Office.

'I don't wish to be facetious,' he added, 'but they could have been something from outer space."

Stockport: Very strange reflections

Manchester Evening The Chronicle on August 7 reported as follows: "Strange silvery objects' shooting out from behind a high, white cloud, were spotted today by people living in the Heaton Moor area of Stockport. The cloud was reported to be in a south-south-easterly or southeasterly position from where it was spotted. Eye-witnesses said that about 20 or 30 objects varying in size appeared from the cloud and travelled across the sky before disappearing. Speed

and course varied, but they generally took a westerly course. None appeared to be falling.

"'It went on for about two minutes and it looked like something breaking up in the sky,"

said one witness.'

At Manchester Airport an airtraffic control official said: "An all-white French Caravelle flew in over that area at about that time. In strong sunlight, Caravelles give off quite a few reflections. Light can play strange tricks."

Cannock: Round and spinning

The Wolverhampton Express and Star on August 16 carried the

following report:

"Round, spinning, and yellower than a star. This was how a group of neighbours in Bennion Road, Chadsmoor, Cannock, saw a strange object in the sky last night.

"'People laugh when you say you saw something like this, so I'd rather not give my name,' said one of them, a girl office worker, today. 'But about 20 of us saw whatever it was for a few seconds

at about half-past ten.

"' The thing disappeared towards Walsall and we are certain it wasn't a shooting star.'"

Lovell learns

When Sir Bernard Lovell, Director of Jodrell Bank, was asked to comment on Major Titov's successful orbit of the earth for twenty-four hours he replied that it was "rather staggering." On a B.B.C. sound broadcast, he said that it proved that the human organism was not so dependent on earthly conditions as had been believed. This, he added, was vitally interesting, because it supported earlier theories that some form of organic development might have taken place under very different conditions in many places in the universe.

It was once held that the human frame could not withstand

a speed of twenty-five miles per hour. Ten years ago, journeys into space were fraught with insurmountable obstacles. Without belittling the achievements of the new astronauts, it would seem that, as usual, the stay-at-homes the unimaginative ones greatly exaggerated the hazards under-estimated human ingenuity and adaptability. One of these hazards was held to be weightlessness, and it is good to know that Sir Bernard has at last been "staggered." The shock he has suffered is not vet sufficient to open his mind on our subject, though he is bound to be in for a good few jolts in the coming months. If he were a wise man, instead of just a clever one, he would get his public recanting in hand fairly quickly. But that is too much to hope for.

Swindon mystery

A Swindon couple, Mr. and Mrs. D. Down, of 323 Cricklade Road, saw an unknown object descending from the sky on August 10. The "canister-type" object was seen at 8.20 a.m. Mrs. Down said she was looking over the tops of the houses opposite her home. "It was descending in the far distance very, very slowly. It did not leave a trail of vapour. I have never seen anything like it before," she said, adding that she then shouted to her husband who also saw it. Finally, they lost sight of it as it entered the clouds on the horizon.

(See Swindon Evening Advertiser, August 10.)

Jodrell Bank's new role

The Manchester Guardian on September 22 reported that steps have been taken to equip the radio-telescope at Jodrell Bank for the detection of missiles have been taken by the Air Ministry. It is admitted however that the radio telescope can never make an ideal detector of ballistic missiles. "One reason for this," says the Guardian, "is that the telescope can only be sensitive to

radar signals from a narrow part of the sky—that part at which the telescope is pointed." If the Guardian is right, then the explanation given to the FLYING SAUCER REVIEW for the confusion as to whether certain signals were coming from Venus or from the area of Manchester becomes even more bewildering. (For full details see September-October issue).

The reason for the extra duties which have been assigned to Jodrell Bank may well be because of the rumour that, within the next year or so, Russia intends to put one of her larger H bombs into orbit as part of her declared aim to preserve the peace of the world by threatening it unmistakably from outer space.

NORTHERN IRELAND:

Belfast's persistent visitor

The Belfast Northern Whig on May 17 reported: "The mysterious green object which was first seen in the sky early on Monday morning (May 15) is now in the third day of its 'flying visit' to Northern Ireland. Three young men phoned the Northern Whig office last night to say that they (had) seen something 'a very bright colour with a green background and bigger than a star travelling very fast towards Cavehill,' as they were walking through Cliftonville Circus at about 10.30 last night. They were able to watch it until it went behind low cloud.

"They were definite that it was neither an aircraft or a star. 'It looked just like a something out of a science fiction film,' one of them said."

of them said."
(Credit to H. T., Belfast.)

Belfast mystery

A Belfast draughtsman and his wife reported seeing an object like a "flashing red ball" in the sky just after midnight on July 27. They observed the object—which was silent — through binoculars for more than two minutes. The couple, who live on

the Saintfield Road, said it crossed the sky twice, flashing constantly. When it "stopped in its tracks" for several seconds, the flashing stopped and then resumed when the object proceeded in the opposite direction.

(See *Belfast Telegraph*, July 27. Credit to our readers, Mr. George R. Brien and Mr. Thomas Thompson.)

Mystery light

The Irish Press on August 28

reported as follows:

"A mystery light—'much bigger than any star'— and flying 'rather slowly' across the sky in an esterly direction, was reported by a resident of the Knock area of Belfast early yesterday. Police to whom he reported the object also saw it.

Mr. Ian Poole said he first noticed the light—high up in the

sky at 5 a.m.

He was convinced it was not a plane. There was no noise and the object occasionally dipped and rose in its flight. He telephoned Belfast police control at the Commissioner's office in Ladas Drive, Castlereagh, Belfast. Policemen there confirmed what Mr. Poole had seen.

Despite intermittent cloud, the object was seen for some 20 minutes before sunrise. It was, they agreed, not a meteor, as it had no tail and was travelling too slowly. Experts yesterday would

not commit themselves."

(Credit to Mr. Fred O. Stead.)

AUSTRALIA: Angel hair

It was reported in the Melbourne Sun on August 15 that twelve round flying objects—moving fast in pairs — were sighted by ten independent witnesses near Meekatharra on August 14. Meekatharra is 480 miles north-east of Perth. The objects left a white trail of "streamers" which floated to the ground.

The fine mesh-like "streamers"

crumbled and disappeared when picked up by startled watchers at Mt. Hale Station, 75 miles west of Meekatharra.

The silvery round objects passed over the station at regular intervals between 8.20 and 9.15 a.m. "They were flying at 8,000 to 10,000 feet about the same speed as the Russian Sputnik we saw a couple of years ago," said shearing contractor Edwin Payne, aged 37.

When the incident was reported to the police, Constable Jim Coyle checked with the Department of Civil Aviation, which said that no aircraft were in the area and no meteorological balloons had been sent up. "I picked up one of the 'streamers,' but it vanished in my hands as it touched my skin," said Mr. Payne. He then drove back to the station to see if he could find any more of the "streamers" with the aim of preserving them for analysis.

An official of the Royal Australian Air Force promised to make a report on the incident to the Department of Air. He even went so far as to say that the sighting was extremely interesting and that it could possibly produce some break-through into the mystery surrounding many flying object reports. We can only hope that his superiors will share his open - mindedness, but past experience does not encourage us to expect anything but silence.

(Credit to Mr. David A Carpmael.)

TRISTAN DA CUNHA: Bright object

Islanders here who usually rely on passing ships for a break in their routine have had more than their share of excitement over the past few days.

Since the last report a further three earth tremors have been felt. Then this morning (August 12) between 10 a.m. and 10.45 a.m. GMT a bright object was sighted moving across the sky from south-east to north-west.

It was too bright and moving too fast for a star, but appeared to be moving too slowly for a satellite.

(Cape Times, August 12. Credit to Mr. Philipp J. Human.)

SOUTHERN RHODESIA: Cigar-shaped object

A mystery object with "terrific acceleration" invaded the sky over Bulawayo on the night of Monday, August 14. The sighting was made by Mr. Michael Gardner, acting senior traffic officer at Bulawayo Airport. "I have dealt with thousands of aircraft and this was like nothing I had seen before," he said when interviewed by a Bulawayo Chronicle reporter (see issue dated August 17).

Mr. Gardner was driving into his Glenville home on Monday night when he saw a craft at about 1,500 to 2,000 feet, travelling westwards. "It was a conical shape, similar to a cigar. Then I saw green flames come from its rear and it vanished with an incredible acceleration," he said. Mr. Gardner said he could see no wings on the craft. Later he checked with traffic control—and no aircraft was scheduled to be in the area at the time of the sighting.

(Credit to Dr. H. Johnston.)

Doctor corroborates

The mysterious flying object seen in the sky over Bulawayo on Monday night (August 14) by Mr. Michael Gardner, acting senior traffic officer at Bulawayo Airport, was also seen by a City doctor, Dr. I. Goldberg, from near his home in Morningside. Dr. Goldberg has checked with Mr. Gardener, and their descriptions of the object and the time at which they saw it tally. Dr. Goldberg said when the object disappeared, that it seemed to explode in a whitish light.

(Bulawayo Chronical, August 16-17. Credit to Mr. Philipp J.

Human.)

SOUTHERN RHODESIA:

The *Umtali Post* on June 7 carried the following report: "A family who live 10 miles from Umtali, on the Melsetter road, are wondering whether the strange sight they saw on Thursday night (June 1) was a satellite or a flying saucer. 'We were at dinner' Mrs. A. H. Cawood writes, 'when my little girl ran to the kitchen to get something off the stove. She suddenly shouted. "Mummy, come and look at that star. It's changing into all colours." True enough, it was actually changing from bright red to a yellowish green, to bluish mauve and back to red. It appeared to be moving. It was low on the horizon in a south-westerly direction. We kept on watching, quite fascinated, as it slowly disappeared in the same direction. My husband, who was standing on the lower step, did not see the last flash as it disappeared, and pointed to another star which was due west from us in about the same horizontal line. 'There she is now,' he said, 'You can see her moving.'

"'I replied that my daughter and I could still see the last flashes of the first star. We then watched the second star, which was also very bright but did not change its colours. It was heading straight west and growing dimmer until it finally disappeared. There were no other stars so low in the sky. Our whole family were watching and saw them plainly; and none of us had been to any cocktail parties."

BRITISH GUIANA: Cone-shaped object

The British Guiana Chronicle, published in Georgetown, reported the following incident in its June 7 issue: "Hundreds of people looked skywards

vesterday morning wondering at the strange cone-shaped object which moved slowly high in the sky. Some said it must be a Russian Satellite, others an American Satellite and one clever chap said it was Sparrow's Satellite. The object was first seen over Georgetown about two weeks ago and also on Monday morning (June 5). It appeared above the horizon about 7.45 a.m. yesterday (June 6) and was visible for nearly half an hour before it disappeared. Persons who saw it said it was more visible yesterday and was cone-shaped, glittered as if made of aluminum and had a long tail-like vapour trail."

The accompanying sketch (see below) was prepared by Halvard White, a Fountain Primary School pupil who saw the object on three occasions.

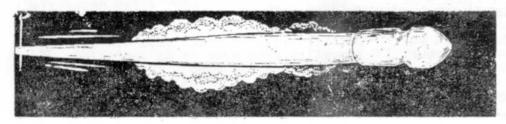
SOUTH AFRICA: Circular and high

An unidentified object was seen in the sky above George (Cape Province) by two teachers and a number of pupils of the Outeniqua High School on Monday morning (August 17). It was travelling in a northerly direction. All were agreed that the object was circular and very high, as though it was reflecting sunlight, but that it was impossible to estimate its size, height or speed. It was visible for three or four minutes before disappearing behind the Outeniquas in the Saasveld area.

(George and Knysna Herald, August 11. Credit to Mr. Philipp J. Human.)

U.S.A. Ozma closes

The UFO Investigator, the official bulletin of the National



Investigations Committee (NICAP), reports in its July-August issue, that Dr. Struve has recently stated that he is abandoning his plans — originally announced in 1959—to listen at his radio-astronomy observatory at Green Bank for signals emanating from intelligences in outer space. These plans were soberly announced at their inception, but now Dr. Struve states: "I'm not sure we should even answer if we receive signals. When scientists ask when we will resume, I tell them to come back in 100,000 years. "Contradictory explanations have been issued for this sudden volte face: they include inadequate equipment and lack of funds, but none of them are wholly convincing. The two articles in the current issue referring to Ozma were written before this news was announced.

Saucer hit by bullets

On October 19, 1959, at 6.15 p.m., two boys, 15-year-old Mark Muza and 14-year-old Harold Moore, Jr., saw a circular shaped object about 4 feet in diameter, above the ground over the desolate area known as the Big Marsh at Poquoson, Virginia. The object had a dark centre encompassed by a six-inch wide silvery rim glowing brightly as if selfilluminated and it appeared to the witnesses as being metallic. Muza who was resting on his knees at the time, had a 12gauge shotgun with him, and suddenly seeing the object coming down as though on to his head, fired at it three times, on the last occasion when it was about 50 feet above him. Each time he heard the ring of metal on metal. Moore also heard the metallic rings as the shots were fired and also the whirring noise the object made in its flight. Immediately after the third shot, both boys saw the object go straight up spinning like a top. Muza said the noise was like a tornado. The vertical speed of the object when it departed was too fast to estimate. The incident was first reported in the Newport News Daily Press for October 21, 1959.

Although this incident is two years old, we include it both for the intrinsic evidence of the saucer's solidity and also for the official reaction. The Air Research Group of Newport News, Virginia, has just issued a detailed report of the incident and the refusal of the American Air Force to investigate it. If this is the official attitude to such a circumstantial sighting no wonder the percentage of "true unknowns," can be kept down to the lowly figure of 2 per cent. Might we suggest that all authentic saucer stories could be eliminated by this process? It might indeed prove easier to ignore any sighting that threatened to evade analysis and to concentrate only on those which would yield a conventional "explaining." The authorities could then announce that there were no "true unknowns" at all.

Navy alerted

According to the *UFO Investi*gator for July-August, recognition charts showing two types of UFOs are now posted for quick use on the bridges of most American ships. One of the UFOs is a typical round "flying saucer" and the other a bat-like space craft with port-holes along the side. These charts would seem to demonstrate that in spite of Air Force denials, the U.S. Navy, at least, is prepared to admit the reality of UFOs and to be aware of the danger that a misinterpretation of one of these mysterious craft might cause, leading, perhaps, to the triggering off of a dreaded nuclear war.

The astronautical congress

The London Daily Telegraph on October 5 commented on the proceedings at the 12th Astronautical Congress then being held in Washington. Among the topics discussed was the possibility of intelligent life on other planets. The American Dr. Webb said that astronomers believed that plant life existed on Mars, and the famous canals did not show anything resembling a natural pattern.

On September 28, the scientific expert on the London Daily Express, Chapman Pincher, who once disbelieved in flying saucers but who now keeps his mind open, commented on this Astronautical Congress and remarked that only four years ago many of the topics on the agenda would have

been considered lunatic. He gave one or two instances, among them "Legal Aspects of Encounters with Living Forms" by Dr. Harold Lasswell of the Yale University Law School and "On the Possible Existence of Intelligent Beings" by Dr. Margaria of Milan University.

Three types of person will read these announcements with varying reactions. The flying saucer believers will note that the day of vindication is fast approaching. The ordinary man in the street will read the announcements with a detached interest. He will not, at the moment, consider that this startling change of opinion can presage anything that can have any possible impact upon him and his in any foreseeable future. He will quickly pass on to another part of the newspaper which he considers does concern him and his family. There is a third section and that includes people like Bernard Lovell and the Astronomer Royal who will wince like salted slugs and hope that the inanities which they boldly proclaimed a few years ago will by now have been forgotten. However, it's even later than they think, and it is now impossible for them to escape from their unenviable immortality.



A LETTER FROM THE REV. N. E. G. CRUTTWELL

N previous issues of the flying saucer review we have reported the attempt made by the Royal Australian Air Force to discredit one of the most circumstantial of all the sighting reports, the well-attested account of a saucer seen, with

As having had personal contact with the Rev. W. B. Gill and most of the other Papuan witnesses, and also with the Rev. L. Browning of Tasmania, I would like to comment on one or two points in recent issues of the "Flying Saucer Review":

- (1) Referring to the most interesting and ingenious article by Dr. B. E. Finch ("Flying Saucer Review", March-April, 1961) he states that "in all reports of flight and hovering three brightly luminous 'legs' projections are seen". I would like to point out that the following objects had not three but four such appendages.
- (a) The object seen by Father Gill and 38 witnesses at Boianai.
- (b) The object photographed over Belgium, and published in the "Flying Saucer Review", January-February, 1961 (see Aime Michel's text). We may add to these:
- (c) The object seen a week before Father Gill's sighting at Boianai by Papuan teacher Stephen G. Moi. He described it as "like a saucer with four dots beneath".
- (d) An object seen over Lae, New Guinea, by six native crew members of our mission launch in January, 1960, who described it as "umbrella shaped" with four "windows" on its under surface. These were arranged in a 'square" pattern.

Finally, what of Radio Officer Fogl's object? It appears to have three legs only, but they are curiously placed at three corners of a square, as if there should be a fourth. Was there a fourth leg either retracted or pointing directly towards the observer and so invisible?

From all this I would conclude that we must be very careful not to over-simplify the issue. I see no reason for supposing that the "Adamski"-type craft with the three landing balls is the same as the "legged" craft. No suggestion of the ladder-like junction was seen in the Papuan machines. Nor do these more flattened "double-decked" vehicles seem to have the same shape as the more domed "Adamski" type. Whether the legs are an alternative undercarriage or retractable electrodes it is hard to say, but they seem to be characteristic of a particular type of UFO. My impression is that there are many types of UFOs visiting our planet, just as we have many different models of aircraft. Some of these types are now becoming recognisable as they have appeared a number of times in different places.

four human occupants, over Papua in 1959. The following letter was too long for inclusion in Mail Bag, but we think it should be printed in full in view of its importance to our study:

(2) Referring to the letter to Dr. Finch from Squadron-Leader F. A. Lang of the R.A.A.F., to the best of my knowledge he has not visited Papua since the Boianai sightings nor has he interviewed any of the witnesses. I believe that Father Gill was interviewed by another R.A.A.F. officer. I do not suppose he has read my report, which is full of corroborative evidence of the Boianai sightings. The most conspicuous planet at the time was Venus, but it was not in the right position to account for the object. Other planets would hardly have been noticeable at the time for the sky would not have been properly dark. It is curious that Mr. Ernest Evennett, twenty miles away across the bay on the same night, also interpreted a planet as a large hovering machine with portholes that made a noise and changed colour as it sped away. His sighting is presumably unknown to the R.A.A.F., but it amply corroborated Father Gill's. Nor does it need the actual sighting of men to prove that the machines were intelligently controlled. Mr. Evennett's machine, with its four portholes, which arrived, hovered and departed, was surely also manned?

However, the interest shown in the Fogl photograph and the refusal to disclose their report suggests that the R.A.A.F. are still

worried.

(3) I feel obliged also to answer on behalf of the Rev. L. Browning whom I have met and fully discussed his remarkable sighting. Mrs. L. Pugh points out an inconsistency in his remarks "as printed". I questioned him on that very point and he told me that he does not believe that the objects came from Russia, but that the words were put into his mouth by a reporter who asked him the slanted question: "If the saucers come from a hostile power on earth which country would you say they are most likely to come from." "Well, Russia, I suppose", was the obvious answer. Like most of us, Mr. Browning is puzzled, but he gave me the impression that he believed the objects to be extra-terrestrial. case such expressions of opinion in no way invalidate his clear description of what he and his wife saw. I might add that Mr. Browning is a highly-respected clergyman, the Rector of Cressy, and a member of the Tasmanian Council of Churches.

This independent sighting by another Anglican priest of such similar objects confirms the veracity of the Papuan reports

by Father Gill and others.

The spacemen threw stones ANOTHER CONTACT STORY FROM BRAZIL

In accordance with our declared policy, we are anxious to publicise the contact claims. Although this meeting is alleged to have occurred some years ago, we think that many of our readers will be unfamiliar with the incident. It has been taken from the A.P.R.O. Bulletin for May, 1961, published from 4145 E. Desert Place, Tucson, Arizona, U.S.A.

In 1947, when the flying saucers were seen frequently in the United States, the sightings were received with considerable scepticism elsewhere. Brazilians were no different from others. One unusual event which took place in that country in 1947 was recorded, then shelved until 1954 when Brazil underwent extensive UFO surveillance. At that time the following incident found renewed interest among Brazilians. Whether or not it is true, we cannot say, but certainly it is an unusual case. It was first printed on August 8, 1947, in Diario Da Tarde and the Correio Do Noroeste, in Bauru. Then, in 1954, the case was reviewed along with a sketch in O Cruzeiro.

A circular ship

On July 23, 1947 (only 29 days after Kenneth Arnold's experience), topographer Jose C. Higgins was working at a location west of the Goio-Bang Colony, north-east of Pitanga and southwest of Camp de Mourao. When crossing one of the few fields in that region, he heard a high-pitched, piercing whistling sound, which seemed to come from the sky. Higgins looked up. He said that what he saw "raised the hair" on his head. Higgins described a "strange, circular air ship with protruding edges absolutely similar to those of a drug capsule" which was coming down out of the sky. The workers accompanying him, all countrymen, became frightened and ran. Higgins said he stayed to see what might happen.

"The strange craft crossed over the field in a closed circle and landed softly about 150 ft. from where I stood," Higgins stated. He said the object was about 150 ft. wide, but not including the edges, which were about 3 ft. in width, and the whole object was about 15 ft. high. "It was crossed by tubes in several directions," Higgins

said, "but there was no smoke or fire, only that

odd sound coming from the tubes."

The object, when landed, was supported by curved metallic-looking poles which bent even more when touching the ground. The whole craft appeared to be made of grey-white metal, yet different from silver. Higgins walked toward the machine to examine it more closely, and while looking it over he discovered a kind of window or porthole which appeared to be made of thick glass. Then he saw through the glass two persons watching him curiously. They were very strangelooking. A few seconds passed, then one of them turned his back as though talking to someone in the craft. Immediately Higgins heard a noise inside and a door, which was located on the under side of the craft, opened, and three people came out. They were enclosed in a kind of transparent suit which enveloped their bodies completely, head and all, and inflated like a rubber bag full of compressed air. On their backs there was a metal box that seemed to be a part of the suit. Through the transparent covering, Higgins could easily see what they wore. They had on shirts, short pants and sandals. The garments did not appear to be made of cloth, but rather appeared to be of a brilliant coloured paper. Their strange appearance was partially due to their eyes, which were large and round, and without eyebrows. They had no beards, and their heads were large and round and almost hairless. The length of their legs was greater in proportion to their bodies than those of a normal human being, and their height was about 7 ft. tall—about a foot taller than Higgins.

Higgins called attention to the fact that all the men seemed so similar to one another that they appeared to be twins or at least brothers. One of the men on the outside carried a tube which appeared to be of the same metal of the ship, which he pointed at Higgins. The strange men talked among themselves, but Higgins was unable to understand what they said, although he said they sounded quite pleasant. He also noted that despite their large bodies they moved with incredible agility, forming a triangle around him. The one holding the tube made gestures motioning Higgins toward the door. He approached the door. Through it he could see only a small chamber limited by another door on the inside, and the end of a pipe coming from the inside. He also noticed several round beams on the side base of the protruding edge.

Higgins then began to talk, asking about the place where they apparently wanted to take him, using many gestures. They seemed to understand, and one of them made a drawing on the ground with a round spot at the centre and encircled by seven circles. Pointing to the sun in the sky, he then pointed to their craft, then to the seventh

circle, doing the latter several times.

Higgins readily admitted that he then became frightened. He felt they wanted to take him off the earth, and he began frantically to figure some way to get away from the men. He knew it was impossible to fight them because of their large size and number. Then he had an idea. He had noticed that they avoided the direct sunlight for more than a few seconds, so he walked toward the shadow, and taking out his wallet he showed them a photo of his wife. With a lot of gestures he made them understand (or at least thought he did) that he wanted to go and get her and take her with him on the proposed trip.

Their behaviour

The strange men did not attempt to stop Higgins, so he sauntered casually away and entered the forest. He found a safe place from which to watch them without danger of being discovered and was surprised at their antics when left alone. They were playing like children, jumping in the air and throwing stones of enormous size. After about half an hour and a careful examination of the surroundings, the men got back into their ship which took off with a whistling sound. The craft moved away into the north, and finally disappeared into the clouds.

"I will never know if they were men or women," Higgins said later when he related his story to the press. He continued: "Despite the characteristics I described, they were somehow beautiful and appeared in excellent health." Higgins remembered the sounds of two words: "Alamo" and "Orque." The first one corresponded to the Sun, and the other to the seventh circle in the drawing.

Higgins concluded: "Was it a dream? Was it real? Sometimes I doubt that these things can happen, and then I think that if it was not for the workers together with me in the beginning, it might have been a strange and fascinating dream."

The "Saturn-shape"

above described incident was That the described in the press a month after Kenneth Arnold's sighting, there can be no doubt. The Arnold sighting received little, if any, attention in Brazil. This is one important point in the evaluation of this sighting. It has been established that the incident was first publicised in 1947, only a few weeks after the Arnold sighting. The shape of the object seems to indicate that it is of the "Saturn-shape" type or the "double washbowl" type, neither of which type had been established through evaluation and compilation of data at that time. Little if any information concerning any type of disc or UFO had been compiled. Higgins apparently described something which was to become "common" to UFO researchers vears later.

How much importance can be attached to the drawings on the ground is debatable. At any rate, despite the fact that one of the creatures pointed at the sun, it is not known for certain whether it was our sun to which he referred. The seventh planet from the sun in our solar system is Uranus, and as far as we know it is a cold, inhospitable planet. But we know so little about that planet that we cannot speculate about possible life. The space suits worn by the creatures could signify that they could not survive in our atmosphere, if indeed the incident took place, or they could merely mean that no experimentation with adaptability without protection had been

undertaken.

The size and apparent strength of the creatures, plus their throwing large stones, etc., could indicate an origin with a lesser gravitational pull than the earth, and that the gambolling antics of the giants was experimentation with the novelty of the earth's gravitational pull.

MAIL BAG

Astronomer's sighting

Sir,—You may be interested to know that now that I am an active member of the British Astronomical Association. I come in contact with observers from

various sections.

One observer, Mr. K. S. G. Stocker, F.R.A.S., of Wallington, Surrey, claimed a sighting of an unusal UFO during 1957. He has promised to let me have details, and does seem interested in the subject. He claims that good sightings are rather rare, but as the result of his experience he retains an open mind. Mr. Stocker's work for the B.A.A. includes colour photography of the stellar heavens and tracking of artificial satellites. — Susanne R. Stebbing, 26 Walmington Fold, Woodside Park, London, N.12.

Cosmic energy

Sir,—The Japanese typhoon of 1934 airlifted an assortment of ships from sea to shore. What if some twentieth-century Benjamin Franklin had been watching? If he had proceeded to make a study of whirlwinds and had stumbled on a method of generating and controlling them and it had been duly exploited, we might have been riding manmade cyclones by now in fabulous chromium - plated "skywheels"...

The aeroplane age began with the harnessing of certain chemical compounds and, with luck, will survive the harnessing of nuclear fission. The rocket age likewise.

One store of energy that has yet to be tapped is the atmosphere itself, which presses in all directions equally. How to tap it?

Flight on a whirlwind. Design a circular machine that will start a whirlwind turning or a "smokeless ring" rolling and will feed back just enough air pressure 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.

energy to keep the vortex in motion.

In a natural vortex, the whirling particles are driven by compression forces directly—without the intervention of any mechanical devices or chemical actions. As they lose potential energy on their inward spirals they gain kinetic energy, which can very easily rev them up to supersonic speeds. (Vortex flow is more fully dealt with in Sherwood's Aerodynamics.)

A regenerative vortex converting atmospheric pressure into motive power: that would be perpetual motion, which was unthinkable until recently. The thought-block: gravity. Then—scientists became certain that gravity travels in waves like radio and light at a speed of 186,000 miles a second. (Daily Express, September 6, 1957.)

That being so, we can appreciate that the energy in air pressure must be of Cosmic origin. Nothing less than Cosmic Energy can maintain the perpetual

motions of the Universe.

And when it comes to traversing ten thousand million or more miles of partly-radioactive space, nothing less than perpetual motion coupled with a protective spatiodynamic field is worth considering. — Robert Morison, 41 Roma Rd., E.17.

Exeter sighting

Sir,—Further to your remarks about the Exeter sighting and weather balloons in your September-October issue, I would like to make the point that when Bristol University — or anybody else, for that matter—sends up one of these contraptions they

publicise the fact of the launching in every possible way. This is not surprising as the main, point of the exercise is to keep track of the balloon and to recover its instruments. Had the object over Exeter Airport last June been a weather balloon there would have been no need to await upon an explanation from the Air Ministry or any other official body. Furthermore, I doubt whether a radar tracking of a stationary balloon would have revealed a "very large" object. The radio-sonde attachment, the only metallic part, is small by comparison and would not have produced a large enough echo to justify the description quoted .-Richard Winster, Formby, Lancs.

Professor Lovell

Sir,—May I say how greatly interested I was to read your article in the September-October issue? Since the appointment to Jodrell Bank of Professor Lovell I have always felt that a tremendous mistake had been made by the selection of a man with an obviously closed mind. In 1953, I wrote to Profesor Lovell about his broadcast on flying saucers and received the following reply: "Thank you for your letter of June 15. I am sorry if you found my broadcast irritating. I am well aware of the contents of . . . the three books which have been written on flying saucers and also of the qualifications of their authors. There is not the slightest satisfactory piece of scientific evidence that there is anything at all unusual connected with the flying saucer phenomenon." -Eric G. Boughton, 921 Harrow Road, Wembley, Middlesex.

WHAT THE SOVIET PRESS IS SAYING

(Continued from page 19)

is this not the obvious explanation why there were reports last year of only one unidentified satellite in orbit round our earth?

It seems that Prof. Hermann Oberth knows a very great deal more about the matter than he is at present prepared to reveal. All the same, I suggest that these various hints and clues all add up to the most startling revelation yet made about the saucers.

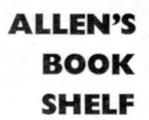
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1957-Volume III: No. 6 only available.

1958-Volume IV: No. 4, 5 and 6 only available.

1959—Volume V: No. 1 out of print.

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