

FLYING SAUCER

REVIEW



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Flying Saucer Review

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Saucers and the press

IN our previous issue we wrote of the attitude of governments: in the May/June number there appeared an article which commented on the silence in the press. We believe that because the government and the press have been reticent of late on the subject of flying saucers there has grown up a suspicion that there is some sort of master conspiracy to suppress both news and comment. This belief, we hold, cannot be supported by any evidence other than the silence itself, but to maintain that it has been artificially produced is to mistake effect for cause.

One reason for government silence has already been suggested in these columns. Governments are concerned with security: newspapers are concerned with news. Both these considerations have, in their different ways, militated against publicity for the flying saucers.

Accompanying the article to which we have referred was a photograph of the front page of the *Sunday Express* for October 8, 1950, and the caption mentioned that the *Sunday Dispatch* of the same day had given equal front-page prominence to our subject. There was no conspiracy of silence on the part of the English newspapers ten years ago, and the same can be said for the American newspapers. Those who hold that some form of censorship is now in operation must concede that it is of recent imposition. In 1950, we can reveal that a very famous man not unconnected with the British Government was, in fact, urging the *Sunday Dispatch* to bring the subject to the attention of its wide public.

The article in the Review prompted us to investigate rather more thoroughly the current attitude of the press. The first discovery was that the present features editor of the *Sunday Express* had no idea, until our photograph of the *Sunday Express* front page was brought to his notice, that flying saucers had figured so prominently in that paper ten years ago. The lesson we learnt from this was that the attitude of the press is very largely that of its editors and their assistants. Some of these editors may consider flying saucers just a stunt and without serious connotation—people must be allowed, we suppose, to hold such a view—and they will therefore be very reluctant to repeat the sensation of yesteryear, particularly if no new slant can be produced to give the matter topicality. Indeed, the *Sunday Express*, we happen to know, has commissioned an article on flying saucers and is holding it for a more opportune moment. Newspapers are primarily concerned with news, as we have already

remarked. Too many people by now have claimed to have seen silvery discs in the sky over the last twelve years for the appearance of a flying saucer to have any news value at all. At least, the only news value left is local, and that is the reason why local papers will still give space to a sighting. The locality rather than the saucer supplies the interest, particularly if a prominent citizen can be persuaded to come forward as a witness. It is a dilute censorship indeed that lets the local papers escape the alleged tyranny—but escape they most certainly do.

Those who suggest that there is some form of press censorship at work are very often those who are remote from the world of newspapers, and, when pressed, cannot bring forward one shred of evidence that the editors have been put under a form of restraint. We can speak from first-hand experience, and we can assure our readers that it is either consideration of news values or a personal disbelief in saucers that holds the subject back. For that matter, we knew one editor who was reluctant to print anything more about saucers because, he explained, he felt he had already printed enough. He was a believer in the subject, as it happened, and he feared that he might be starting to bore those readers who were not interested in the saucers. Our readers should be reminded, we think, that many other people

do not find the fascination in the subject that we do. The majority is more interested in sex and crime and sport, and reference to any of a number of newspapers throughout the world will show that these people's tastes are better catered for than ours. Besides, flying saucers have become a specialised subject and for people interested in topics that need a concentrated attention there is usually a specialist journal to supply the need; this Review was called into being for that very purpose.

What we cannot understand is why the situation should be regarded as depressing. It really is full of hope. If saucers have lost their news value it is because they have become more commonplace and accepted, despite what the sceptics may say. Once it was news to see a heavier-than-air machine in the sky: nobody rushes to report one now. The early artificial satellites were front-page news a year or so ago: today, unless there is something very special about them, they hardly rate six lines in a national newspaper. One cannot have one's news and go on eating it for ever. It is part of a subject's adolescence to develop from sensation into full acceptance. We are midway between the two—a matter, surely, for rejoicing rather than for the conjuring up of sinister figures in the background terrorising poor newspapermen into an unwilling silence.

Evolution

We shuddered yesterday at the impiety which dared to claim kinship with lesser creatures than ourselves; tomorrow perhaps will exist greater creatures than ourselves upon earth who must admit affinity with us. Yet they will feel no shudder when they do so. Being wiser than we were, they

will know it childish to take shame of their origin. Why do we still imagine that Man, of all created beings, should be an end in himself and not a becoming to something yet more wonderful?

Eden Phillpotts: *One Thing and Another*.

DESMOND LESLIE

answers DAVID WIGHTMAN

Controversy over the Adamski photographs has recently flared up again. In a recent issue David Wightman suggested that Adamski had photographed a model based on one prepared by Lonzo Dove in 1932. Desmond Leslie now produces his testimony in support of the world-famous Venusian scoutships.

AS I am probably the only one from this country who has ever handled Adamski's telescope and photographic equipment, or bothered to make a proper analysis of his negatives, and as a film director with quite an experience of trick photography, I am probably in a slightly better position than Mr. Wightman to pontificate on the validity of Adamski's photographs.

I want to make it clear that my objection to Mr. Wightman is not his so-obvious prejudice against Adamski. What I object to is the dishonesty of his arguments. I would like to give a few examples of Mr. Wightman's speciousness.

In correspondence with me in the past he said that "fine measurement" of the Adamski saucer picture in the frontispiece of *Flying Saucers Have Landed* showed that of the three landing balls beneath the saucer, the one nearest the camera was slightly larger than the one on the far side, thereby proving that the saucer was not half a mile away as stated, but a model quite close to the camera. Reaching for my calipers, I made my own fine measurements (at which I claim to be as competent as anybody) and found to my surprise that the exact opposite was true. The ball *farthest* from the camera was, in fact, slightly *larger* than the one nearest to it. What did this prove except that either Mr. Wightman or Mr. Dove was incapable of taking measurements? It proved, I suppose, that one ball was larger than the other. Unfortunately, in the second saucer photograph showing the underside more clearly, all the balls are the same size. I did not find the solution to this mystery until my next visit to Palomar Gardens when I made Adamski set up his telescope pointing in the

exact direction in which it pointed in December, 1952. The time was about the same as when the pictures were taken, and the heat haze rising off the valley produced a considerable "shimmer" which distorted all objects I looked at. I lowered the telescope ten degrees and picked up a farmhouse on the hill approximately where the saucer had hovered. As I watched, the tin roof changed shape, enlarged, contracted and vibrated. Had I taken a photograph at that moment, undoubtedly the result would have shown one window larger than another. The mystery was solved! Atmospheric distortion was responsible for making one ball of the saucer seem larger than another.

A photographic authority

Mr. Wightman then remarked that "competent authority such as astronomer Patrick Moore had pronounced them fakes." In this context he presumably meant Mr. Moore's authority as a photographic expert. Well, Mr. Moore is a very close friend of mine and, although we disagree violently on many things, we both agree fully that Mr. Moore's experience as a photographer is negligible. His standing as a lunar astronomer is first class, but to use his own words: "my experience of photography consists of a Brownie camera in which I usually end up with a blurred photo of my waistcoat button." So much for his competence as a photographic expert.

In the May/June issue of the *FLYING SAUCER REVIEW*, Mr. Wightman talks about "the optical analysis which shows Adamski never used his telescope to photograph a flying saucer but only an ordinary camera. The analysis shows that the model was approximately one foot in diameter."

This much publicised "optical analysis" consisted of mismeasuring the balls beneath Adamski's saucer!

If real optical analyses are to be cited, we can quote two or three competent experts among whom I make so bold as to include myself along with Joseph Mansour and film director John Ford.

John Ford's Testimony

Anyone with experience of tele-photography who has obtained an original print made from the original Adamski negatives will at once notice a factor that has to be taken into account by all film directors using models to represent full-size objects, a factor known sometimes as "atmospheric softening." This phenomenon is due to moisture and dust in the atmosphere so that it is impossible to match up a foreground model with a distant background (however sharp your depth of focus) unless certain partial gauzings and screenings are used. The effect through a tele-photo lens is to produce a certain greying and flattening which is practically impossible to reproduce artificially. Tele-photography also slightly alters the perspective, hence the flattening and greying effects clearly noticeable in Adamski's pictures. When I gave enlargements to John Ford for careful analysis, the first thing he remarked was: "These are no models. I can tell without going further that these are very large objects shot through what I should imagine to be about a six-inch lens."

Here we have an expert, one of the senior directors of Hollywood giving us the result of his forty years of film experience. He then went on to inspect the pictures of the mother ship. "My God!" he jumped, "that's the ship that Dan saw!"

"Dan" turned out to be an under-secretary for the American Navy, a close friend of Ford's, who while flying in his command plane, surrounded by his aides, had obtained a wonderful sighting of a mother ship that seemed almost to come alongside. "Dan" was full of it on landing, but the next day retracted his statement under orders from the Navy Department. "Dan," said Ford, "is about the most unimaginative man I know. He could no more invent a tale like that than see pink elephants, and, anyway, all his staff got a good sight of it, too. And that's it, that photo your friend Adamski has taken!"

Ford took the pictures away for further analysis and, when I saw him again some months later, confirmed his original opinion that (a) the saucers were large objects shot through a tele-photo lens of about six inches focal length (Adamski's telescope is a six-inch reflector) and

(b) that the mother ship photographed was definitely the one that had frightened his illustrious naval friend.

Now to Joe Mansour, whose job it is to make photos of model aircraft so that they appear real. His opinion coincides with John Ford's. Definitely not models but large objects seen through a tele-photo lens.

As for my own analysis. I established first that the camera Adamski used was the attachment he fits to his telescope. This camera has no lens of its own but fits on to the eyepiece and uses the optical system of the telescope for its lens. A simple but effective arrangement. As it has no lens of its own, it cannot possibly be used without the telescope.

Now, how did I establish which camera had been used? Quite simply. The camera attachment uses peculiarly-shaped plates, quite different in size from anything used in an ordinary camera. So by comparing the plates with the negatives Adamski lent me I saw at once that they were exactly similar and could have been taken only on the camera attachment and through the telescope. And yet Mr. Wightman, who has never seen the negatives, never seen the equipment used, and never been within 5000 miles of Palomar Gardens, calmly asserts that these pictures were taken by an ordinary camera.

The "Golden Mean"

Recently I had the pleasure of meeting a famous British architect named Pollock, who lives in a beautiful Lutyens house on Lambeg Island, Co. Dublin. Pollock told me he had done a lot of work on orthographic projections of Adamski's photos and had discovered a very interesting fact. He said that all the proportions of Adamski's flying saucer conformed to the Greek "Golden Mean." The "Golden Mean" was a mathematical principle by which the Ancients produced the perfect proportions of their buildings. Legend has it that this and the other principles of architecture were taught to the Initiates of our race by the "gods" who came from Venus and dwelt among us in the early days, teaching us the arts and crafts! Pollock was aware of that and thought it highly significant.

By way of a test, I asked Adamski, during his visit last year to explain to me what the "Golden Mean" was. He looked blank. He had never heard of it. Strange, indeed, that he should have been able to construct a model using a most precise formula that he had never heard of. Indeed, I know of few people outside of professional architects who could apply that principle to a draughtboard.

I'd also like to know how Stephen Darbishire,

Dan Kumbalk!

then aged 13, did it. Mr. Wightman thinks that Stephen could have faked his pictures by taking orthographic projections of Adamski's photos and then reconstructing the model. So he could, if he had: (a) known how to produce orthographic projection, which he did not; (b) had a lathe on which to turn an accurate model from his blueprints, which he had not; (c) understood the principles of classical architecture, which he did not.

Mr. Wightman also dismisses Mr. Potter and the seven members of the Norwich Astronomical Society. Either they are liars, or if, as his muddled argument suggests, they are truthful and Adamski a fake, or that Darbshire is genuine and Adamski a fake, then he only goes to prove that he has a pathological resentment against Adamski for which he had best consult a good psycho-analyst.

The Dove model

He goes on to suggest that everyone who has seen or photographed a Venusian flying saucer is a wicked plagiariser of his dear friend Dove. To back this up he shows a model of a saucer made by Dove which looks as much like the

Adamski saucer as a London bus—a dome on a breadboard under which are seven coat buttons or radio knobs and a triangle of string. I fail to see the slightest resemblance other than it is round in shape—as most saucers usually are.

Further evidence

To the list of people infringing Mr. Dove's saucer must, therefore, be added the world-famous astronomer who under pledge of secrecy not to reveal his name sent to Patrick Moore some photographs he had taken of an Adamski-type saucer. These photographs were clearer and better than any yet to be taken, and when submitted to orthographic projection, turned out to be identical with those taken by Cedric Allingham and published in his book *Flying Saucer from Mars*. It is a great pity that the famous astronomer will not allow his name to be revealed, but he admits quite candidly that he is afraid of his colleagues. He and Patrick Moore, to save their souls, managed to convince themselves that what was seen was an experimental type of craft built on earth. This was four years ago and we are still using rockets to send satellites to the Moon!

PHOTOGRAPHS

The following photographs are available in half-plate size at 1s. 6d. each (post free). Complete set of 10 for 15s. (post free).



1. Venusian scout ship photographed by G. Adamski, December 13, 1952.
2. Venusian scout ship rising, showing underside details. Photographed by G. Adamski, December 13, 1952.
3. Flying saucer over New York. Photographed by August Roberts on July 28, 1952.
4. Mother ship releasing scout craft. One scout has begun to leave.
5. Mother ship releasing scout craft. Two scouts have taken off.
6. Mother ship releasing scout craft. Five scouts have left the ship.
7. Mother ship releasing scout craft. Six scouts are now to be seen.
8. Giant carrier ship photographed at 7.58 a.m., May 1, 1952, by G. Adamski.
9. Submarine type space ship, photographed March 9, 1951, by G. Adamski.
10. Space ships photographed near the moon, May 16, 1951, by G. Adamski.

When ordering please give numbers of photographs. Send order with remittance to FLYING SAUCER REVIEW, 1 Doughty Street, London, W.C.1, England.

The New UFO Policy of the U.S. Air Force

by **PROFESSOR**

CHARLES A. MANEY

ALTHOUGH a formal government project for the investigation of UFOs (Unidentified Flying Objects) was not set up until September, 1947, the United States Air Force has been vitally interested in sightings of these objects ever since June 24, 1947, the day Kenneth Arnold reported seeing nine mysterious saucer-shaped craft travelling with tremendous speed in echelon formation over the Cascade Mountains between Mount Rainier and Mount Adams in the State of Washington.

On December 24, 1959, the Inspector-General of the United States Air Force issued a directive to Air Force personnel to the effect that "unidentified flying objects—sometimes treated lightly by the press and referred to as 'flying saucers'—must be rapidly and accurately identified as serious USAF business." In this directive instructions are given as to the manner in which this "serious business is to be handled at each Air Force base." A "specific officer" at each base is to "be designated as responsible." He is to have the "authority to obtain the assistance of specialists on the base." He is to be supplied with some simple scientific apparatus to be used in the detection and study of UFOs. The list of equipment is to include "binoculars, camera, geiger counter, magnifying glass, and a source for containers in which to store samples."

Study of UFOs a serious business

From the above referred-to directive we are to conclude that it has taken the United States Air Force exactly twelve and one-half years to arrive at the conclusion that UFOs are real, and that the study of these phenomena does constitute "serious business."

Also in the directive is found the statement of

the "Air Force concern" that "there's the inherent USAF responsibility to explain to the American people through public-information media what is going on in their skies."

From time to time within the past 13 years the USAF has given highly publicised statements with big headlines in the American newspapers to the effect that the so-called flying saucers simply do not exist. For example, on October 26, 1955, the then secretary of the USAF stated "we believe that no objects such as those popularly described as flying saucers have overflowed the United States." It should be noted that the Air Force secretary based this statement upon a "study" made by Captain Edward J. Ruppelt, concluded actually two years and one month earlier, and judged "worthless" by the man in charge of the study and other investigators who have taken time to analyse it.

About one year ago, on July 16, 1959, and preceding this latest directive by less than six months, the Air Force gave nation-wide publicity to the following statement: "Investigation of unidentified flying objects has provided no evidence to confirm the existence of the popularly termed 'flying saucers' as interplanetary or interstellar space ships."

Behind the scenes

Let it be pointed out that the USAF *did not give any publicity* to the content of its December 24, 1959, directive six months later, which officially recognised UFOs as "serious business" and which set up machinery for the ostensibly serious scientific investigation of these phenomena. It was the "National Investigations Committee on Aerial Phenomena," NICAP, a non-profit private organisation with headquarters

in the nation's capital, which gave the contents of this directive nation-wide publicity.

Vice-Admiral R. H. Hillenkoetter, NICAP Board member, former Director of the Central Intelligence Agency of the United States, made this comment in regard to this new Air Force directive:

"Behind the scenes, high-ranking Air Force officers are soberly concerned about the UFOs."

"But through official secrecy and ridicule, many citizens are led to believe the unknown flying objects are nonsense. To hide the facts, the Air Force has silenced its personnel through issuance of a regulation. Veteran airline pilots and other technically-trained observers have been discredited. Hundreds of authentic reports, many confirmed by radar or photographs, have been labelled delusions or explained away by answers contrary to fact."

The Kilian sighting

A good illustration of the USAF policy on the handling of UFO sighting reports over the years is to be found in the case of the UFO incident of February 24, 1959. One of the key observers of this phenomenon was Captain Peter Kilian, a pilot for American Airlines. His plane was on a non-stop flight from Newark, New Jersey, to Detroit, Michigan, on the night of February 24. When over Phillipsburg, Pennsylvania, at about 8.45 p.m. he observed three unidentified brightly-illuminated aerial objects trailing his plane. The plane was followed for 35 or 40 minutes by these objects, which were observed not only by the crew and thirty-five passengers of Captain Kilian's plane, but also by five other planes and numerous ground observers in the line of the trip.

Exhaustive details with respect to this incident are given in the 22-page printed report compiled by the Unidentified Flying Objects Research Committee of Akron, Ohio. NICAP also thoroughly checked the facts of this sighting, and so we have here an incident concerning which we have the most reliable information possible. The files of the Akron Committee contain the signed statements of several ground observers.

Concerning this sighting it can be reasonably concluded that the number and character of the witnesses establishes the validity of the incident beyond doubt.

A superficial investigation

Representatives of the Air Force made only the most superficial investigation of this incident, an investigation (if such a term could be used to

dignify its semblance of effort) based on Captain Kilian's brief preliminary statement made at the Detroit Office of American Airlines and upon a news report from the March 1 edition of the *New York Herald Tribune*.

The Akron Committee report states: "They (the Air Force) *did not interview* Captain Kilian (the pilot), nor did they question co-pilot Dee, the stewardess, the passengers, nor the ground observers. As far as is known, none of these people were at any time contacted by ATIC (Air Technical Intelligence Command)."

Even though they had no first-hand information of this incident, the Air Force issued official explanations of the sighting on three separate successive dates, all *three explanations completely contradictory*. These so-called explanations are as follows:

(1) On the morning of February 28 the Air Force released to the press this official opinion:

"Experts of the Technical Intelligence Agency said that they believed the pilots may have sighted stars, especially the formation Orion."

(2) The March 1 edition of the *New York Herald Tribune* carried an official Air Force statement in direct answer to an inquiry about this sighting by six American and United Airline crews on February 24. Quoting the NICAP Bulletin, *The UFO Investigator* for February-March, 1959:

"Some (witnesses) were sarcastically labelled as persons who *can't remember anything when they sober up the next day*. The rest, implied the official Air Force spokesman, either were deluded by ordinary objects or were outright liars."

(3) Subsequent comments by the observers of this incident apparently disclosed to the public the errors of these judgments, and so, three weeks later, the Air Force offered an entirely different explanation, as follows:

"The American Airlines sighting of February 24, near Bradford, Pennsylvania, three weeks later turned out to be a B-47 type aircraft accomplishing night refuelling from a KC-97 tanker. . . ."

Captain Kilian's statement

In a statement to the *Long Island Daily Press* on March 24, Captain Kilian said, "I don't care what the Air Force says, the objects I saw could travel at 2,000 miles an hour and were definitely not conventional aircraft."

"If the Air Force wants to believe that," he added (referring to the refuelling operation explanation), "it can. But I know what a B-47 looks like and I know what a KC-97 tanker looks like; further, I know what they look like in

operation at night. And that's not what I saw." Kilian claimed that this was the Air Force's third explanation of his sighting, "all contradictory and none satisfactory."

Captain Kilian is no longer discussing his sighting of the three unknown objects. After his initial comments in newspapers, exposing the obvious flaws in the Air Force's explanations, the muzzle was quickly applied. American Air Lines, through Air Force insistence, was forced to silence Kilian, their attitude being that good relations with officialdom must be maintained at all costs. Consequently, he was requested not to publicise "so controversial a subject."

A loss of freedom

Captain Kilian has commented: "I feel very deeply concerned with this loss of my own personal freedom." The first amendment to the Constitution of the United States reads in part: "Congress shall make no law . . . prohibiting the freedom of speech or of the press; . . ."

While the silence order was imposed on Captain Kilian, however, the same did not apply to Mrs. Kilian. She remarked, "Although the Captain isn't talking, I can talk. . . ." Mrs. Kilian was asked if Captain Kilian would be willing to go before the Space Committee hearings in Washington to relate his story. Mrs. Kilian replied: "Definitely. In fact a Senator asked the Captain if he could come to Washington and tell his story. The Captain said 'Yes, I would go, but you would have to subpoena me. Then, I could talk.'"

From *NICAP Bulletin, July-August, 1959*:

"In a recent development, the Air Force is now circulating a statement, allegedly from American Airlines, quoting Captain Peter Kilian as saying that he had never seen jet refuelling operations at night and that the UFOs he saw on February 24 could have been a jet refuelling operating. The unsigned statement is in *direct contradiction* to the statements Kilian made to the NICAP Director, to the *Long Island Daily Press*, and in taped interviews. In effect, Kilian's statements have been branded by the Air Force as lies, after they apparently requested American Airlines to silence him so he could not answer back. American Airlines had deliberately arranged some of Kilian's early publicity before he was suddenly told to stop talking. Copies of the contradictory statements have been sent to several members of Congress."

Radiation and a Landing

On the night of November 6, 1957, about 11.30 p.m., Olden Moore, a plasterer, driving home

from Painsville, Ohio, was startled by the sight of a disc-shape bright object suddenly looming up in front of him, seemingly splitting apart, one section apparently disappearing, the other settling down in a field near the road. This locality is about thirty miles east of Cleveland. This incident is reported by Mr. George Popowitch, Director of the Unidentified Flying Objects Research Committee of Akron; an account of it is published in the *APRO Bulletin* of January, 1958.

When the object landed, Mr. Moore shut off his car lights and pulled his car off the road. He got out of his car and watched the object for about twenty minutes. He noted a ticking sound, somewhat like the tick of a water meter.

At 11.30 a.m. the next morning his wife reported the incident to Geauga County Sheriff Louis A. Robusky. Later in the day Mr. Moore was questioned by various local authorities, United States Army representatives, and scientists from the Case Institute of Technology. Geiger counter readings taken in the middle of an area fifty feet in diameter where the object had landed, registered ten times normal background activity. At the perimeter of the area the geiger counter readings were about fifty per cent. greater than normal.

It was learned that Mr. Moore had gone to Washington D.C. in connection with this sighting of the UFO. On his return he indicated that he had talked to high officials and had been sworn to secrecy. Further details of the sighting were unavailable from Mr. Moore.

Geiger counter evidence

This incident is given as an illustration to show a connection between the sighting of a UFO and the apparent great increase in background activity as registered by a geiger counter in the vicinity of the sighting.

Let it be especially noted that the December 24 Directive of the United States Air Force specifically refers to the equipping of Air Force bases with geiger counters along with other scientific apparatus. The reason for providing bases with such equipment is, of course, obvious. The Air Force has information of many instances wherein UFOs have been observed visually and on radar, where geiger counters in the vicinity of the sightings have registered the presence of greatly increased background radiation.

Captain Edward J. Ruppelt, in charge of the United States Air Force investigation from early in 1951 until September, 1953, in his book, *The Report on Unidentified Flying Objects*, devotes an entire chapter, Chapter 15, "The Radiation

Story," to relate the experience of government scientists who observed great increases in geiger counter readings in connection with sightings of UFOs. Different groups of scientists in various locations in the United States encountered these phenomena, and determined by thorough and painstaking procedure that the great increases in background radiation associated with the sightings were in some way caused by the presence of the UFOs.

Termination of studies

One of these groups became so interested in this strange type of coincidence that they began to develop elaborate arrays of scientific devices for the more thorough study of the phenomena. This promising scientific study came to the attention of high officials and was suddenly nipped in the bud. Higher-ups at Washington arranged for the transfer of the alert-minded Air Force colonel in charge of the project.

These same governmental authorities now at long last, without fanfare and without intentional

publicity, have decided that UFOs are "serious business" and that the honest-to-goodness study of such phenomena should be undertaken by Air Force personnel. And so this December 24 directive was issued. Air Force personnel at the various bases are being supplied with apparatus and equipment which in competent scientific hands could without doubt be used to gather valuable information concerning the nature of UFOs. One wonders whether or not Air Force personnel, lacking the rigorous training of experienced scientists, will be able to utilise such equipment to advantage.

The problems presented by UFO phenomena are of such difficulty and of such tremendous significance that the study of them should be a wide-open world-wide programme. *The challenge presented by these navigated objects from outer space needs to be met by the world's best technological and scientific talent, unhampered by government restrictions, secrecy, red tape and inefficiency.*

Human life on 150,000 planets

-Russian biologist's bold claim

IT does not seem very long ago since the objection to all saucers put forward in orthodox circles was that intelligent life could not exist beyond the earth. That particular objection has had to be dropped and elsewhere in this issue we refer to a change of view by a notorious sceptic, Chapman Pincher of the London *Daily Express*. This objection having been dropped, the saucers inevitably gain in respectability.

Nearly all the contact claims have been rejected by scientists because, in their view, if life on other planets should exist it would have taken other than human form. That objection, however, is beginning to disappear, and those of our readers who are disposed to dismiss Adamski and others merely because his contacts were with human beings might be well advised to re-

examine the basis of their disbelief.

Yuri Rall, a Russian doctor of biology, has recently published an article in *Nedelya*, a supplement of the Government newspaper *Isvestia*, on the subject of life on other planets and his conclusions were broadcast by Radio Moscow.

"There are about 150,000,000,000 stars in our galaxy," Dr. Rall said, "and astronomers believe that one in a million of the stars has a planet on which conditions are suitable for the evolution of life. So there may be life on 150,000 planets."

Dr. Rall went on to say that he disagreed with some fiction writers who depicted intelligent inhabitants of other planets as being utterly unlike human beings. Biological factors, he

said, persuaded him that they may resemble man.

"An intelligent inhabitant of remote planets is sure to have a highly organised nervous system (comparable to the human brain) and a skull to protect it against accidental damage. Since there is force of gravitation on any planet, the brain, or an organ similar to it, must be located in a special part of the body, free from excessive strain. Another surmise is that intelligent beings on other planets must move in space and consequently must have symmetrical limbs and organs of sense." Dr. Rall concluded by writing: "The law of unity of physiological functions and the most economical adaptation to environment must inevitably lead to a similarity in principle of the higher organisms in the universe."

Saucers and Science

by **PETER F. SHARP**

IT has become a very popular pastime in the pages of the *FLYING SAUCER REVIEW* to bait and criticise the scientist and the scientific method. Much of the criticism reveals a complete lack of understanding of the way in which science works, so a short outline of the methods of science and their value to UFO research may help to eradicate some of the more common misconceptions and give a clearer picture of the misunderstood men in white coats and the methods they use.

Perhaps the most remarkable thing about the scientist is that in all probability during his training he never received any instruction in the scientific method as such. He learns laboratory techniques, basic laws, and theories, and may be encouraged to criticise his own results and the theories he is taught, but seldom does his course include lectures on the scientific method or scientific philosophy. This is something that it is tacitly assumed he understands and it is partly due to this reason that so many scientists are mere technicians, competent only to perform operations that they have learnt during their education.

The life blood of science is research—the attempt to discover the laws governing a set of phenomena and the explanation of these laws by theories. The theories themselves suggest further experiments that produce evidence which may result in the theory being modified or rejected completely. The ultimate objective is the complete understanding of the physical structure and operation of the universe. Scientific laws are the framework on which all theories and the majority of experiments are based, and for our purpose we may define a scientific law as the precise description of the behaviour of matter under a stipulated set of conditions. The test of laws is observation and experiment, and a law is held to be valid until these tests consistently indicate that the law is incorrect.

Two fundamental methods

Investigation is carried out mainly by two fundamental methods or by some combination of these. The purest method is that adopted by the theoretician who studies the empirical laws

established by observation and seeks a generalisation, a theory, that will correlate all the laws. The prime test of the theory produced is that it shall explain all the laws, but the theory is largely valueless unless it can predict new laws for which suitable experiments can be designed. If the experiments confirm the predictions the theoretician may pat himself on the back and proceed with a wider generalisation. Einstein's theory of relativity falls into this class; it explained existing laws and predicted new ones that have subsequently been confirmed. The weakness of the theory does lie, however, in the relatively few experiments that can be designed to verify its predictions. It is for this reason that there was so much excitement in scientific circles about the recent experiments conducted at Harwell and in the United States which enabled a gravitational red shift to be measured and thus test a prediction of the General Theory of Relativity.

The second point

The second fundamental approach is that of the observational scientist. The majority of scientists involved in research fall into this category. A set of data is examined and relationships are sought between various features. The relationship is extrapolated into a region not covered by the data and then fresh observations are sought to test the extrapolation. The results obtained usually mean a modification of the original relationship and a modified extrapolation is then made and the whole process repeats itself. Thus research is seen to proceed by successive approximations. Finally a law is formulated which is strictly valid only over the range of values covered by the data and is empirical and remains so until it is explained by an accepted theory.

One does not have to be a scientist to appreciate that science has made great advances in our understanding of the universe and appears to be adding to our knowledge at an ever-increasing rate, but does science give us a full understanding of reality, are there branches of knowledge to which the scientific method cannot

be applied? We begin to approach deep waters when this topic is broached, but in general terms we can readily appreciate that the scientific method is not the panacea for the complete understanding of the world. Take art, music and humour; the methods of scientific analysis and dissection can tell us certain facts about all these but in the process something indefinable is destroyed. The humour of the joke and the beauty of the music and painting is lost—is there anything more painful than hearing a joke explained to a dull-witted person?

Reality, then, is something more than the bare bones that science gives us and we remember Pascal, "The heart has reasons of which the reason knows nothing."

Science must communicate

There are other means of acquiring an appreciation of reality such as mystical experience and intuition; these are intensely personal experiences and are incapable of being communicated fully to others. The findings of science can, and must, be communicated and lose nothing of value in the process, and in this respect are more universally valid than subjective experience. Nevertheless, the mystic always says "I Know," whereas the scientist can only say "I know."

Before we become lost in a maze of metaphysical speculation let us return to UFO phenomena. Can the scientific method be applied in this case and if so how? The answer to the former question is a most emphatic yes as the application of the method has already given some startling results. The approach may be in several ways, two being illustrated below.

The scientist when confronted with a spasmodic and seemingly unpredictable phenomenon examines the sighting reports and looks for a pattern or law of behaviour. Aimé Michel has done just this. He applied the scientific method to the observational evidence for UFOs and from the chaos of reports in France in 1954 discovered orthoteny, the most startling and significant discovery in the whole field of UFO research to date. The next step will be the examination of past and/or future sightings for this same pattern of behaviour. If it again emerges we may well see a far larger number of scientists considering UFOs as a suitable field for scientific enquiry.

Aimé Michel's fellow countryman, Lieut. Plantier (one can appreciate why the French have a reputation for being logical) applied a more theoretical approach. He had the germ of a theory of gravitational propulsion in his brain and saw in the UFO reports indications that the

objects might be using such a means of propulsion. His theory made certain predictions of UFO performance which have since been verified. It was remarked earlier that research proceeds by a series of approximations, that is, a theory is dynamic, hence Plantier's theory must be studied, criticised and tested again and again so that its limitations and possibilities may be found. If this is carried out we may safely anticipate that further important results will emerge from the theory.

A well-known argument

One of the universal characteristics of the scientifically trained mind is its scepticism of unverified speculations. Until tests can be devised and have been applied the scientist will not, and indeed cannot, commit himself if he is to speak scientifically. As is often pointed out in *FLYING SAUCER REVIEW*, scientists do sometimes speak unscientifically but it is illogical to deduce from this that the scientific method itself is at fault. We know that a specialist may be a man of wide culture but he cannot make dogmatic statements about other fields of science as he fully knows only his own (and in fact his specialist knowledge may even colour his opinion). This argument is well known to the readers of the *REVIEW*. However, although those specialists who poor-pooch UFOs are held up for ridicule in the *REVIEW*, those specialists who are equally unqualified to make *ex cathedra* pronouncements on UFOs, yet who believe that UFOs exist, have praises heaped upon them.

Subjective judgments

In the leader of the May/June issue the Editor justifiably rails against those scientists who rushed to give seemingly subjective judgments on UFOs. Whilst not trying to defend those scientists, may I point out that the *REVIEW* falls into the same trap. I quote from the leader:

"We have noticed that those who are spiritualists tend to view the mystery in terms that belong to spiritualism. Those who are extra-dimensionalists already are those who apply their theories to the saucers—and so on."

Yet on page 14 of the same issue when discussing the mystery submarine seen off Argentina it was stated:

"Why can't it be admitted that the whole thing is a complete mystery . . . and that by treating the matter as just one piece of a vast jig-saw puzzle try to fit it in and so complete the picture of the greatest twentieth-century conundrum: Are we alone in the universe?"

Surely here we have the ufologist applying a

subjective judgment to a phenomenon that has only one similarity with his own phenomena, that of being mysterious? The two may or may not be related but in the absence of evidence for the former would it not be better to consider the submarine separately from UFOs?

Speculation not evidence

Incomplete understanding of the scientist's mind has led to the impression that the scientist has been dragged kicking and screaming to the recognition that we are very probably not alone in the universe. One has only to read the popular scientific writers of the last hundred years (Sir Robert Ball, Sir James Jeans, etc.) to see that the scientist has been speculating on the possibility of life in the universe all along. But speculation, even by scientists, does not constitute evidence and what we have seen in the last three decades has been the accumulation of evidence that planetary systems are not rare phenomena as previously thought but occur throughout the

entire universe frequently. Such a prevalence of planets implies a very high probability that somewhere in the universe there is intelligent life. This was forcefully stated by Dr. Harlow Shapley in an article for the *Sunday Times* in April, 1956; he stated that Man must now adjust himself to accept the fact that he is not alone in the Cosmos just as he had to adjust himself to previous revolutions in thinking such as the overthrow of the geocentric concept of the universe by Copernicus.

We have seen that it is valid to apply the scientific method to UFOs just as the Society for Psychical Research applies it to analogous phenomena. We must have patience, for science feels its way, slowly checking everything; hypotheses are valueless if built on weak foundations. Above all let us remember Thomas Huxley's advice: "sit down before fact as a little child, be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses nature leads, or you shall learn nothing."

Waiting for a space message:

another scientist wakes up

IN 1959 Morrison and Cocconi made the suggestion (in an article in *Nature*) that there might be advanced societies elsewhere in the Galaxy who are beaming transmissions to us at a frequency of 1,420 megacycles. In the May 28, 1960 issue of *Nature*, Professor R. N. Bracewell, of the Radioscience Laboratory, Stanford University, California has returned to the subject with a learned article discussing the possibilities. He makes a number of interesting remarks during the course of the article.

In the first place, he warns that we should be on the alert to receive such inter-stellar signals: "We must avoid relegating them, if they are there, to the fate of the very strong emissions from Jupiter (of the order of 1,000 megawatts per megacycle) which

were heard and ignored for decades."

Professor Bracewell goes on to suggest that the superior intelligences may have been attempting to contact the earth for the last thirty years and that they may even have sent out a robot "peace dove" rocket with an electronic brain which could carry on a two-way radio talk with us and relay our signals to distant galaxies. He suggests that, in order to ensure use of a wavelength that could both penetrate our ionosphere and be in a band certain to be in use, the probe could first listen for our signals and then repeat them back.

"To us its signals would have the appearance of echoes, having delays of seconds or minutes, such as were reported thirty years ago by Stormer and van der Pol and

never explained."

Professor Bracewell concludes his essay by remarking that "the prospect of catching a technology near its peak might be a strong incentive for them to reach us."

Nature is perhaps the scientists' most authoritative journal and the remarks we have quoted will command a respectful hearing. Professor Bracewell's article marks yet another milestone along the road to realization that we are not alone in the universe. The day cannot be far distant when the wide breach between the pundits and the public has been closed. At the moment the learned professor is prepared to listen for messages from outer space, while those, less renowned but equally reliable, have to face ridicule and disregard for their accounts of events that have taken place in our own atmosphere.

PRACTICAL STEPS

to encourage visitors from space

suggested by

JOHN M. LADE

NEWSPAPER references to the possibility of other intelligent beings inhabiting the universe are becoming more frequent. The London *Daily Telegraph* of January 6, 1960, carried a front-page article entitled "Scientists to Seek Life in Outer Space," describing the American space-radio monitoring plan named Ozma: "Oz was the far-off and inaccessible place where Ozma was queen and where the wizard came from." Quoting further: "Two physicists from Cornell University recently presented in *Nature* the argument that other inhabitants of the universe would try to communicate first by radio waves. One of the physicists, Professor Philip Morrison, has just visited Imperial College, London. He said . . . such communities would try to establish a link, and then pass on technical advice about how to improve reception. Before any advanced kind of language had been arranged, they would be transmitting pictures to us." "I suppose the signals will lead from mathematics to language via pictures," the professor added.

Space travel achieved

Those who have accepted the reality of flying saucers, studied the evidence for the extraterrestrial source of these craft and wondered what it all means, are inclined to the view that the inhabitants of at least one or two other planets in our own or neighbouring solar systems are, in relation to our rate of scientific development, decades if not centuries beyond the stage of communicating only by radio. They have apparently achieved space travel and their

ships have been seen here intermittently throughout history.

Accepting this, one realises that they must be either indifferent to us or passive friends. Our civilisation has grown up in ignorance of their existence—until now. The thousands of sightings, in the air and on the ground, since Kenneth Arnold's famous encounter in 1947 over Mount Rainier in the State of Washington, show that any indifference appears to be diminishing; indeed, we could be of growing interest to our neighbours—whose bases or dwellings we plan to visit, believe them empty and moss-grown though we may.

Readers of FLYING SAUCER REVIEW will be acquainted with the argument that friendliness is consistent with non-interference in the development of civilisation on earth. Were a more advanced people to appear as a *deus ex machina* it would bring our history to a close and submerge our culture in its own. This would be a form of aggression and those people would lay up for themselves greater trouble than our world now experiences through the demands of hitherto underprivileged and subject peoples. Friendliness would be shown not by trying to communicate, but by avoiding communication until the time is ripe.

What Marconi believed

Marconi is said to have believed at one stage in his experiments that he was receiving signals from Mars. Suppose he had done so and they were interpreted; by now, regular communication would be established and much information

“Are they human . . . are they friendly”

exchanged. If the Martians were at a higher level of civilisation, would not world governments be referring problems to them? If they were at our level, would not the scientific motive of space exploration be overshadowed by considerations of defence and by a rivalry in getting to Mars before the Martians might get at us?

Suppose radio messages were now to be received, apparently from outer space. Can you not imagine sceptics arguing that these are nothing but propaganda from Sputniks? And, on the other side, that it is a capitalist trick to disrupt the Soviet Union?

A friend of mine, who has more information about unidentified flying objects than I have, recently wrote: “There are many strange and important things which are not revealed to the general public due to fear of jeopardising political and international relationships through wrong impressions.” He adds that even if there is a good case for the U.F.O., it is another matter to prove where they come from. If someone were told, would he be believed? If one or more persons were taken there to see, would it not be said that they had been hypnotised or gone on an astral journey or been otherwise deluded and that such evidence as they might bring back was faked?

Timely self-disclosure

A time will come when we shall see for ourselves; or, rather, be prepared to accept reports from the mechanical inventions sent forth by our scientists. If there are signs of intelligent activity on the Moon, Mars or Venus, that time cannot be far off. Then, these questions will arise: Who is there? Are they human? Are they more, or less, advanced than we are? Are they friendly? This could be the psychological moment for self-disclosure by the crews of spacecraft, here, before we go armed to find the answers to our questions.

Some, who claim already to have met people from flying saucers, say that landings cannot be made openly at present because the visitors would provoke fear and consequent hostility. The danger of this will lessen when their existence is publicly accepted, but no-one should imagine that it will cease. To fear of the unknown will be added fear of the different: fear that the visitors constitute a moral and physical threat to our way of life; fear that they might kidnap us

in the interests of their science; that they might bring unknown diseases; that their customs might challenge our accepted standards in family life, in sex, in economics or in religion; that they might have latitudes we should call license, abstinences we should find insupportable!

In the March/April issue of the *FLYING SAUCER REVIEW* it was claimed that landings can only take place safely when 80 per cent. or more of the population, in the area visited, are friendly.

Best known among those who say they have met people from other planets is George Adamski, who claims several meetings since his original well-authenticated encounter in November, 1952. In 1957 he informed his correspondents that his friends from other planets had suggested he start a “get-acquainted” programme among those who accept the reality of visitors from space. At that time, people were often subjected to ridicule if they displayed interest in flying saucers and they were grateful to have someone to talk to. Adamski, helped by volunteers in different countries, put his correspondents in touch with one another, with the result that many groups were formed and these have had a share in influencing public opinion.

New phase of development

In early 1958 Adamski wrote to these groups: “Our efforts spaceward are excellent, and so long as they continue scientific and peaceful, they are being encouraged by our space neighbours. Like children growing up, this new phase of Earth’s development opens vistas for new experiences of which we have never before dreamed. The system lies open around us, beckoning us to visit and become acquainted. The peoples of other worlds are waiting to welcome us in peace and friendship. If we can grow as one world family, settling our differences and learning to work together in harmony, we will be surprised at the joys and opportunities awaiting us. But this can only come through co-operation—not divisions.

“That is why we who are working in this programme find ourselves in positions of such importance. Through our initial efforts of getting the peoples acquainted with one another, and encouraging fellowship between all without divisions of colour, rank, race, religion, politics, etc., we are doing the essential spade-work to bring understanding and tolerance to our planet.”

In 1959 Adamski went round the world on a

lecture tour, by invitation, asking for nothing but his expenses to be paid. Arrangements were made by amateurs, but there was a surprising degree of co-operation between individuals of different nations and, so far as Britain was concerned, he received a welcome ranging from BBC interviews on "In Town Tonight" (radio) and "Panorama" (television) to would-be audiences greatly in excess of what had been thought possible.

Many willing to believe

There is now, in this country certainly, a strong element of public opinion prepared to accept the existence of friendly visitors from space. Many people would be glad to do something to help to make contact with them, if occasion should arise, but they do not know what to do. Nevertheless, it is unlikely that there will be 80 per cent. of the population believing in and friendly towards such visitors by the time we may expect to get pictures of the Moon, Mars or Venus that might show signs of intelligent life.

The January/February, 1960, number of FLYING SAUCER REVIEW reported a question from South Africa concerning the meaning of the word "service" in the name Flying Saucer Service Limited. In this respect, I have a suggestion to make. I believe that there really are other people in the universe who will eventually be prepared to visit earth openly: I think something should be done about that 80 per cent., and that Flying Saucer Service Limited can help, through the Review.

Long before it could be said that so high a percentage of the inhabitants of any place were prepared to accord a welcome to visitors from space, it should be possible to arrange a welcome by assembling people by private car and public transport. I suggest that groups of people, willing to assemble at their own risk if the call should come, form themselves and notify FLYING SAUCER REVIEW the name and address of one of their number who would undertake to inform the others. In preparing a register of contact men, FLYING SAUCER REVIEW should put any two or more groups in one town or city in touch with one another, retaining only one contact—to

avoid being overburdened. There should be no other correspondence with these groups unless and until FLYING SAUCER REVIEW receives information that a landing will be attempted, when the contact men within a few hours' reach of the area would be informed of the time and place. To defeat hoaxers, such information should be given by letter from FLYING SAUCER REVIEW through the mail and the contact men would be asked to telephone for confirmation before taking action to inform their groups.

Space contacts already here

How could FLYING SAUCER REVIEW avoid being hoaxed? As stated, I believe that space visitors exist. I am also prepared to believe, with Adamski, that they have men on earth unnoticed by us—their own students or contact men. If so, they will become aware of this organisation and be able to take advantage of it. I am prepared to trust the judgment of the directors of Flying Saucer Service Limited, who are businessmen and not proponents of any philosophy or religion, and leave it to our space friends to convince them that they really propose to land somewhere—if they do.

The only requirement of the groups is an awareness of the purpose for which they would be gathering together; namely, to protect the visitors. This does not mean interference with performance of their duties by police, customs or immigration officers, should they be on hand. Such awareness should include being prepared to control their own feelings of alarm at the sight of a strange craft and to stand still at a distance from it until invited to move by some person emerged therefrom, perhaps by gesture or, possibly, in the language of the country.

This is a practical step, given the reality of space visitors. It is a step for which the time may come in months or in years. It is a step which Flying Saucer Service Limited could service. I suggest existing groups discuss it and, if it seems a reasonable step, inform Flying Saucer Service Limited of their desire to register a contact man and have this service performed, should occasion ever arise.

GET OFF THE DEFENSIVE

says **TREVOR JAMES**

ONCE upon a time, in the bad old days of a decade ago, when mechanism was the ruling force in philosophy, metaphysical speculation was the unforgivable sin of science. Officially, perhaps it still is in the more cloistered domains of science. In the hard, practical world of American space programmes, however, things have taken a different turn, a turn that has major significance for ufology.

In what is presumptuously termed "astronautical science," metaphysical speculation is not only the basis of everything planned or envisaged, it is also the basis of a colossal financial investment. There are, as yet, no astronauts and precious little that is scientific in terms of repeatability. But metaphysical speculation is there in plenty, not in the sense of such speculation drawing upon any of the known systems of esoteric science, but in the sense of guesswork.

Astronautical "science" would collapse without guesswork, which it dresses up in quasi-scientific jargon. The ufologist, at his worst, never perpetrated upon the public the frauds that governments now finance as "astronautical sciences."

In American missile companies, regular idea conferences are held. In these gatherings, Ph.D.s and lesser lights pump from their imaginations for the consideration of their fellows, ideas and concepts that would have seen them kicked out of the scientific profession as mystics fifteen years ago.

"Blue Sky" ideas

The U.S. Government calls for "blue sky" ideas, any ideas, no matter how fantastic, that might lead within twenty years to an anti-missile weapon. The progenitors of these blue sky ideas

are then told to *try and prove that the ideas would not be feasible* because they violate natural law or some other permanent factor. Anything not rejected on these grounds would be considered for future investigation. This project, known as GLIPAR, Phase 1, is being financed with one and a half million dollars, and places contracts with firms like Convair, General Electric and Republic Aviation. They will study death rays, anti-gravity machines and magnetic walls.

"Black Magic" considered

The U.S. Navy is purportedly so desperate over the lag in anti-submarine devices that it has recently stated that any idea, "even black magic," will be considered if it will add to anti-submarine techniques.

On the news stands of the U.S. a plethora of technical magazines dealing with the "space sciences" has appeared. Luridly illustrated with photographs of blasting rockets, exploding missiles and blockhouse candids of the over-coffee pioneers, these magazines contain articles by top scientists. The articles are a lattice work of specious, speculative hypotheses, tacked together with "ifs," "shoulds" and "mights." They deal hardly at all with the known. This has no power to stir the taxpayer's soul, nor to stimulate further the already prolific speculation on which all this work rests.

The time has come when the ufologist should take note of these processes, which are utterly destructive of the old order in science. The ufologist must realise that it is time for him to get off the defensive, and understand that there is nothing reprehensible whatever in expressing radical ideas about the UFOs and what they

"... the climate of the truly open mind is upon us"

might be. Nobody on this earth knows by the processes of discursive reason alone whether a human being in his physical-mineral body can cross space. The matter is entirely speculative. Yet billions are now being allotted to this project. Why should any person interested in the observed, but as yet unexplained, UFO feel bashful about "having a go" with a few original ideas? At worst, he will be on ground every bit as firm as that which now quakes under the "sciences" backing the astronauts.

Even the ufologists, who have adhered strictly to the established scientific methods, have had to put up with vilification and mockery in the past from the same people who now wallow in the riches of space appropriations. Far worse has been the lot of those who in one way or another, followed the "etheric interpretation" of the UFO, as first promulgated and propounded by Dr. Meade Layne, of San Diego, California.

These people, including the writer, sought to tackle the UFO mystery by applying to it the yardstick and knowledge supplied to man by the esoteric sciences. In other words, the metaphysical speculation employed by these people had its basis in a metaphysical system dating back into antiquity. Even with its aid, many aspects of the UFO mystery could not quite be comprehended, let alone explained or conveyed to those without a background of esoteric studies.

The etheric interpretation

Some of the persons plumping for the etheric interpretation made a mistake or two, or said or wrote something subsequently shown to be erroneous. This in no way invalidated the overall theory, any more than one missile, shattered and flaming on its pad, invalidates the orbital theory. Yet Dr. Layne, in particular, was frequently attacked for his views, advanced as they were in an era when metaphysical speculation was not

the bedrock of a government programme involving billions of dollars.

There is one phase of the space programme, regarded as of cardinal importance, which demonstrates to all ufologists that any space "science" must rely upon metaphysics for coherent direction. This problem is that of a man in space, or in orbit.

The Russians have already demonstrated that they can hurl a 175-lb. dummy into orbit. The mineral substances of which man's physical-mineral body is formed, can likewise be made to circle the earth. The real problem is the *intelligence that expresses itself through that body*. How to get that back to earth is the milk in our expensive space coconut.

A comfortable conviction

For a century or more, science has coasted along with the comfortable conviction that study of the physical-mineral body of man is all sufficient. Any attempt to explore vital energy, or the intelligence expressing itself through the body, meant that the person making such ventures had to part company with his fellows, philosophically and often professionally. Now things are different. The government pays huge salaries to scientists to get the physical body back out of orbit with the assigned personality still using it.

In the face of all this, the ufologist should take heart. He need have no fear of ventilating his views on the mysterious flying objects. He can feel relieved that hardly anything he may write or say that is rationally expressed could be as imaginative and speculative as the ideas of "astronautical scientists" in their conclaves.

In this incredible age, the climate of the truly open mind is upon us. Every ufologist should rejoice in its advent, and throw off the conceptual, social and scientific shackles that bound him tight in the bad old days of a decade ago.

Mercury, Jupiter and others:

can life exist?

by W. R. Drake

Our contributor has in earlier issues discussed the possibility on each of the three major planets in our solar system, the Moon, Mars and Venus. He now concludes his series with a survey of the facts and speculations about our lesser known neighbours in space.

IN this sophisticated age we find ourselves puzzled by the vital role which the planets used to play in the daily lives of our distant ancestors; today to most of us they seem so remote. We look at the sky only to see if it is raining, yet in ancient times men felt themselves ruled by the stars and larded their very speech with oaths to the Gods: planetary worship was the universal religion. Did the planets loom larger to human vision through an unpolluted atmosphere? Were the planets spatially much closer to Earth having since, in thousands of years, receded in an expanding Solar System repelled by anti-gravity like the galaxies or the pressure of sunlight? Were the religion of the Gods and the wars in Heaven world-wide race-memories of Spacemen visiting Earth?

Our astronomers, mesmerised by their own instruments, insist that the planets are too hot, too cold, have unfavourable gravities and atmospheres too poisonous for human life; they include men of genius, but so did the Ancients; Lucretius only repeated age-old traditions when he wrote of life on other worlds. Like the Ancients, the Space Intelligences state that our Sun does not actually emit light itself but a primal positive force producing light on interaction with the secondary negative force of a planet. Much chemical light, it is claimed, is produced by atomic interaction of atmospheric gases or from certain vegetation; heat emanates from the body of the living planet increased by high frequency radiation from the Sun and by atmospheric phenomena; gravity is a combination of a universal pressure modified by a planet's etheric and magnetic fields, density and tempera-

ture; oxygenated surface air exists beyond the range of atmosphere-obscured spectroscopes.

The well-authenticated landings from flying saucers show the planets are inhabited not by monsters made of silicon, but passionate, wise and sensitive humans like ourselves.

The mystic planet

The Ancients identified Mercury with Hermes, Thrice Greatest, Son of the Sun, Inventor of Magic, the most eloquent and wise of all the Gods. So close to the Sun, Mercury was venerated by astrologers as more occult and mysterious than Venus; its fair-skinned inhabitants had achieved immortality through wisdom, being esteemed as Elder Brothers of Earth. This tradition, strengthened by the many Greek and Roman legends lyricising Mercury's frequent visits to Earth, hints at communication with that mystic planet. Support for this fascinating possibility comes from Palestine, whose early peoples worshipped Mercury as Nebo, God of Wisdom, Creator of the Fourth Root Race, the Atlanteans.

Did the Mercurians create Atlantis? It is significant that Moses, after fulfilling his earthly destiny by leading the Israelites from Egypt into Canaan, ascended Mount Nebo and disappeared. Was that great Initiate translated to Mercury by spaceship like so many culture-heroes whisked to the skies? Hermes or Mercury was generally regarded as the inventor of astronomy, the most ancient of sciences, suggestive of teachers from space.

To modern astronomers Mercury is a small sparkling orange-coloured planet without moons, about 3,000 miles in diameter, seen as a morning

or evening star, showing phases like our own Moon, and rotating around the Sun in 88 Earth-days in an elongated orbit at distances varying from 28 million to 43 million miles. It is believed to roast in ten times as much light and heat as Earth; one day on Mercury lasts a whole year, since one side eternally faces the Sun with a temperature of 700°F., sufficient to melt lead, while the dark side is cold enough to freeze any tenuous atmosphere of carbon-dioxide which its gravity, only one-quarter of Earth's, can retain. Some astronomers, however, ridicule this picture and state that Mercury does rotate and has a neighbouring bright spot which could be a Moon.

Faint markings can be discerned on the hazy surface, but astronomers agree that life as we know it seems unlikely, though some life-forms may exist in the temperate zone between the hot and cold hemispheres. Space Intelligences declare that Mercury rotates very rapidly and is protected by a vast etheric covering which increases gravity and filters the Sun's rays to permit inhabitants of medium height, strong, intelligent and active like the engaging Messenger of the Gods. This suggests that those ancient traditions might be true.

Effect of the Sun

Eccentricities in the elliptical orbit of Mercury could not be explained by Newton's Law of Gravity; Einstein's calculations that the influence of the Sun's gravitational field on the speed of the small planet agreed with the measurements allegedly found were held as a proof of his General Theory of Relativity although Space Intelligences doubt whether Einstein knew precisely what he was calculating about, stating that eccentricities in Mercury's perihelion are due to its proximity to the Sun, whose light-pressure impels the planet to move with greater velocity.

Perturbations in a planet's orbit at once suggest the gravitational influence of a neighbour; eccentricities of Uranus prompted Leverrier to re-discover Neptune. In 1859 Dr. Lescarboult saw a planetary body across the Sun. The following year, Leverrier, Director of the Paris Observatory, named it Vulcan and from six observations determined the planet to be a quarter the size of Mercury and rotating 13 million miles from the Sun in a year of 20 days. During the solar eclipse of August, 1878, two luminous bodies were observed between Mercury and the Sun, but astronomers have not seen Vulcan since and deny its reality although Space Intelligences insist that two intra-Mercurial planets do exist, but they are obscured from

terrestrial observation by the luminescence of the Sun's photosphere.

Late in the eighteenth century J. D. Titius, a Wittenberg mathematician, observed a remarkable numerical relationship between the distances of the planets from the Sun, and in 1772 this was formulated by the German astronomer, Johannes Bode, as Bode's Law, which postulated the existence of an unknown planet between Mars and Jupiter. In 1800 a search was organised and a year later Piazzi located by chance a planetoid, 480 miles in diameter, which he called Ceres; within a few years smaller bodies, Pallas, Juno and Vesta, were discovered; since then about 5,000 asteroids have been observed rotating in a circular belt of 50,000 at 340 million miles from the Sun.

Their small mass is believed to give these minor planets a gravity too low to retain any atmosphere, and as sunlight varies according to the eccentricity of orbit, though in the absence of clouds heat cannot be retained. Astronomers picture them as airless, waterless rocks, utterly devoid of life and lately believe them to be debris from a planet exploding between Mars and Jupiter.

Patriarchs of the Old Testament often cursed proud Lucifer, the Fallen Star, hurled down, from Heaven to the abyss of Hell. Velikovsky identifies Earth's assailant as Venus but Space Intelligences assert that Lucifer was the evil planet, Maldek, whose blasphemous inhabitants aspired to conquer the Solar System, using the terrible sidereal force known to the Atlanteans as Mash-Mak and described in the Hindu Ramayana.

An etheric force

At the end of last century the American inventor, John Keeley, stumbled on this etheric force but was mysteriously silenced before he could reveal a secret for which humanity is still not ready. Explosion of this infinitely-super hydrogen-bomb caused a chain-reaction blowing up the planet Maldek into fragments whirling throughout space; rains of flaming stones scoured our Earth, drenched Egypt with red dust, bringing plagues, disease and death and compelling Pharaoh to free the Israelites; the peoples of America worshipped the burning rocks as feathered serpents while one asteroid is thought to have caused the immense Meteor Crater in Arizona, a cataclysm nearly repeated as recently as 1937 when Hermes, another asteroid, approached within 400,000 miles, missing Earth by a few minutes.

Legends of the Hopi, Navajos and Zuni

Indians tell of ancestors who descended from a flaming star three thousand years ago when our world was covered with red mud and scattered rocks. The Mayas of Mexco recalled blond Gods from the skies, which is partly the reason why they fell such an easy prey to Cortez and his handful of Spaniards.

Some of the asteroids are said to be controlled by Space Beings, who are now propelling these floating islands near Earth; these Intelligences come to warn us that misuse of Nature's forces locked in the hydrogen-atom could blow our planet to pieces like their own Maldek.

Worship of Jupiter

Jupiter was worshipped all over the ancient world as the highest and most powerful of all the gods, suggesting that that brilliant planet must have ruled the heavens. In far antiquity Jupiter was believed to have caused great cataclysms on Earth, possibly the submergence of Lemuria and Atlantis, repeated ages later, when Jupiter appeared to give birth to Venus, an event which ravaged the Middle East during the Exodus of the Israelites, although some blame the exploding planet, Maldek.

The ancient Greeks taught that the infant Zeus, later latinised to Jupiter, was concealed from his father, Saturn, who ate all his children; Zeus eventually killed Saturn, released the Cyclops from bondage, and after a fearful conflict defeated the Titans, descendants of Uranus, and became King of Gods and men.

This confusion resolves into significance when we interpret it in terms of interplanetary war. The Saturnians ruling Earth had degenerated into tyrants, who stamped out rebellions of the Cyclops, probably the Giants of Genesis, whom they imprisoned. Fleets of spaceships from Jupiter (or the moons of Jupiter) attacked in force and after a tremendous cosmic struggle vanquished the Saturnians and their Uranian allies, and freed the peoples of Earth. Thus Jupiter became Lord of all the planets. In Rome the worship of Jupiter supplanted that of Saturn (whose temples were re-dedicated to the victor) and continued as the official State religion until Constantine introduced Christianity.

The Great Red Spot

Largest of all the planets with an equatorial diameter of 88,700 miles, Jupiter rotates 483 million miles distant from our Sun in nearly 12 years; its immense globe rotates on its axis in

only 10 hours, the velocity of 28,000 miles per hour causing its equator to bulge 6,000 miles more than the flattened poles. Most of the planet seems to consist of hydrogen with some ammonia and methane around a layer of ice surrounding a rocky core, although recent theories suggest mainly hydrogen; this tenuous matter gives giant Jupiter a gravity only $2\frac{1}{2}$ times that of Earth; surface temperatures are alleged to be minus 200°F .

Intriguing white spots occasionally appear amid the characteristic dark cloud-belts striping the yellow disc, but since 1878 these have been dwarfed by the famous Great Red Spot, 30,000 miles long and 7,000 miles wide; this crimson oval appears to rotate much slower than the planet's surface, and suggests some local atmospheric disturbance continuing for nearly a century. Is it too fantastic to imagine some intelligently-controlled asteroid?

Life on Jupiter itself seems unlikely; Space Intelligences state that many of the twelve Jovian satellites, notably Io and Ganymede, about the size of our Moon, have atmosphere and conditions similar to Earth with inhabitants like ourselves. These moons of Jupiter have played a fascinating, perhaps misleading, role in celestial mechanics. Kepler found that the cube of satellites' distances from Jupiter divided by the square of their times gave the same quotient, and promptly formulated his Third Law to embrace the whole Solar System; unfortunately some of the planets are ungracious enough not to comply.

The seventeenth-century astronomer, Roehmer, observed delays in the appearance of Io, when our Earth was at the far end of its orbit and thereby calculated the speed of light to be about 185,000 miles per second. Later astronomers and physicists obligingly agreed. Space Intelligences easily discredit Roehmer's calculations and assert that out in space light moves with infinite velocity, thus upsetting Einstein's Theory of Relativity. The peoples of the Jovian moons have developed a spiritual and intellectual wisdom far transcending our own and enjoy a wonderful civilisation; they travel in spaceships to all the planets but visits to Earth make these happy souls somewhat depressed.

Plato states that Saturn (meaning leaders from Saturn) taught men sowing, agriculture and morality, establishing a Golden Age; he founded a settlement on the Capitoline hill in Rome; Etruria abounds with cosmic megaliths and underground cities of the mysterious Cyclops. In

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ancient times Italy was called Saturnia, or the land of plenty. Initiates believed that the Secret Wisdom was communicated by Saturnians to the inhabitants of our Moon, who told men of Earth; this is probably just another way of saying that they used our Moon as a base (as spacemen are doing now) before landing on Earth. The worship of Saturn and the wondrous Saturnian Age was hailed all over the ancient world. Later it degenerated into licence perpetuated by the notorious sexual extravagances of Roman Saturnalia.

The rings of Saturn

Yellow Saturn, diameter 75,000 miles, rotates in 29 Earth-years around the Sun 886 million miles away; swift axial rotation gives a day of about 10 hours. Its vast bulk is believed to be composed of heavy gases with a small solid centre making its gravity slightly less than Earth's; Space Intelligences state that its characteristic three flat rings are the debris of a moon demolished by a comet. A white spot is often observed on the rings, sometimes accompanied by small black spots; since they appear to be fixed it is suggested that the rings do not revolve.

Life in Saturn's atmosphere of hydrogen, with surface temperatures believed to be minus 240°F., seems most doubtful; a noble race of beings in astral bodies are said to inhabit two of the nine moons. Adamski scorns our astronomers and sighs after his dark-eyed Saturnian belles; Menger, who as a reincarnated Saturnian claims to know, talks of an ethereal Saturn and lyricises over some marvellous Being who taught him to play the piano in only one lesson.

Space Intelligences affirm that Saturn is the Seat of Justice of the whole Solar System and that Saturnians not only visit our Earth but actually reincarnate in Earthly bodies to aid Man's evolution. A mysterious unknown, called Vladimir, in an asylum at Prague, is said to be translating our Bible into a coherent language of Saturn; someone should tell him his labours would be more inspiring were he to translate the Saturnian Bible into English.

Beliefs about Uranus

The Magi of ancient Persia knew of Uranus and Neptune thousands of years before the planets were rediscovered in 1781 and 1846, like the old Hindus who also observed Uranus. They excluded both from our Sun's Seven Sons of Light, although some occultists included them among their twelve planets. The Greeks taught that Uranus was one of the first Rulers of Earth until dethroned by his son, Saturn. Could this mean that in far antiquity invaders from Uranus

conquered Earth later to be supplanted by the Saturnians?

Dim, green Uranus shone with baleful influence, its distant inhabitants were feared as wizards conjuring their darksome spells in greenish twilight. This picture is confirmed by Space Intelligences, who describe the Uranians as tall with large eyes and over-developed heads, possibly hermaphrodites, having blood and organs different from our own. Lest we smile with arrogance, it is said that the Uranian spaceships disdain the warring creatures of Earth and seldom visit our skies.

On March 13th, 1781, Sir William Herschel believed he had discovered a comet, although many years earlier Flamsteed had recorded it as a star. Uranus is a giant planet 31,000 miles in diameter rotating in 84 Earth-years around the Sun 1,783 million miles away; its equator tilts almost at right-angles to its orbital plane, so one of its poles turns to the Sun, a luminous point peering through clouds of methane. Gravity is said to approximate to Earth's; temperatures average minus 300°F. and faint unresolved markings intrigue astronomers nearly as much as the five moons in an unusual perpendicular plane.

If Uranus depended on radiation from the Sun life there would be improbable; Space Intelligences insist that chemical light exudes from vegetation and ionisation of gases in the atmosphere analogous to our own earth-shine, though much more intense. This is perhaps confirmed by the fluctuations in brightness and atmospheric turbulence observed in recent years which suggest surface disasters. Certain sensitives among us allege communications from Sirius and Betelgeux, prophesying imminent explosion of Uranus, a cataclysm which threatens the equilibrium of our own Earth.

Mysterious Neptune

Professor Rudolph Tomaschek of Bavaria says that 39 of the 134 great earthquakes in the last 49 years have occurred when Uranus, a giant 46 times the size of the Earth, was directly over the earthquake zone. He claims that Uranus was in a critical position in its orbit directly above Agadir between 10 and 12 o'clock on February 29, 1960; the earthquake destroyed the town at 11 p.m. Had people been warned of the pull of Uranus on our Earth's crust many of the 12,000 killed might have been saved. Like the Ancients, we, too, should keep a careful watch on Uranus. Perhaps our lives literally are ruled by the planets?

The distant sea-green Neptune was personified

by the Ancients as the God of Mystery, who descended to Earth with Apollo as masons helping Laomedon, Prima's father, to build the city of Troy, greatly significant to our own Freemasons. The Greek poets soon dethroned Neptune from ruling the Waters of Space and dragged him down to rule the oceans of Earth. We recall the flying saucers seen plumbing our own seas and wonder whether this symbolism meant visitors from Neptune long ago?

In 1946 Leverrier's famous calculations, the pride of celestial mechanics, were said to be about 500 million miles and 50 years out, an excess so great that American astronomers refused to recognise any mathematical triumph and said that Neptune had been discovered by pure chance. The planet, diameter 28,000 miles, circles the Sun 2,800 million miles away in 165 Earth-years; it has two satellites, Triton, larger than our own Moon, has retrograde rotation, while the tiny Nereid orbits like a comet. Clouds of methane make surface details difficult to see; since the planet receives only one nine-hundredth of the sunlight received by Earth our astronomers believe it fantastically cold. In contrast Space Intelligences assert that chemical light from the atmosphere illumines advanced Beings similar to their neighbours on Uranus.

Irregularities in Neptune's orbit suggested attraction from an unknown planet, which after years of laborious search was discovered in 1930 by Clyde Tombaugh and called Pluto. A little larger than our Moon, the planet rotates in 248 years 3,675 million miles from the Sun (which

must look like a shining speck hardly piercing the icy dark) with a temperature minus 400° F. freezing an atmosphere of methane. Again our astronomers are confounded by the Space Intelligences, who declare that abundant chemical light in an oxygenated atmosphere shines down on inhabitants closely like ourselves on Earth, though more depraved.

The Plutonians misuse their advanced science and dark occultism for evil, their alien space-ships are said to threaten Venus, Mars and Earth. Perversion of sex and psychic forces are dooming their brilliant but decadent civilisation to destruction, and their degenerate planet will soon be whirled into outer space. This fate seems no idle fancy, for already astronomers remark the extraordinary perturbations in Pluto's orbit but ascribe them to the pull of yet another unknown planet, Proserpine.

Earth outlawed

Space Intelligences explain that after the last great War in Heaven all the planets joined the Solar Federation under Saturn and vowed eternal peace. Arrogant Earth was outlawed and quarantined from planetary society by a cordon of deadly radiation. This fantasy seems partly confirmed already by the Sputniks' discovery of the two Van Allen radiation belts surrounding Earth.

The return of the flying saucers shows that our glorious neighbours on other planets are once again extending their benevolence to save humanity on Earth. May we receive them in peace and humility!

Sighting reports . . .

SWITZERLAND, MOZAMBIQUE, MAJORCA,
NEW ZEALAND and ENGLAND, with claims
of a possible landing near EVESHAM

. . . in this issue

Is science infallible?

by **JOHN ROWLAND, B.Sc.**

In recent issues of this Review the scientific approach in the study of flying saucers has come in for some criticism. One of our contributors pointed out that, so far, its contribution to the problem had been at worst destructive and always negative. John Rowland now poses an even more pertinent question: are scientists always right?

THOSE who flatly lay down the law about material things—those who say “There are no exceptions to natural law,” those who say “There is no life on Mars or Venus or any of the planets except the earth”—usually speak in the name of science. Science, according to such pundits, has spoken on many problems, has given absolute and certain and decided answers, and has shown that it is possible to make up our minds about quite abstruse problems by reading what the scientists have decided.

Those who claim that science has not always provided all the answers to all the questions, but that there are mysterious parts even of the natural world where the scientist cannot be dogmatic, have usually been shrugged off as cranks or fanatics. This applies to those who believe in such mysterious forces as that which moves the stick of the dowser; it also applies, needless to say, to those who hold that the mysterious objects in the sky usually known as flying saucers deserve to be taken seriously.

There have recently come my way some rather interesting facts regarding what scientists and scientific writers have to say about something much simpler than either water-divining or flying saucers—the inter-action between metals and acids.

An ingenious chemistry master in a grammar school set his sixth-formers an exercise in research—not the difficult and complicated kind of research which takes place in a university laboratory, but a kind of literary-scientific research. He asked his pupils to get hold of all the chemistry text-books that they could find, to unearth from the pages of those text-books what

was said about the actions of certain quite simple acids on certain quite common metals. Then they were to tabulate the results, and to see if they could relate these statements to what actually happened, when the action of acids on metals was actually investigated at the laboratory bench. I have before me, as I write, the result of such an investigation. It contains a complex table of what various acknowledged authorities say about the action of nitric acid on zinc, aluminium, lead, and copper. Before attempting to analyse those findings here, it should be pointed out that these are quite simple experiments, which must have been performed many thousands of times in school laboratories in the past forty or fifty years. One would expect, indeed, that all the text-books would in a sense copy from each other, and that, if scientists really knew the answers to complex questions, they would quite certainly know the answers to these simple ones.

A simple example

Let me, therefore, take one of the simplest ones first. Let me consider what happens when dilute nitric acid is added to zinc. One text-book says that the main product is ammonium nitrate, but that is decomposed by the temperature of the reaction to give nitrous oxide; another says merely “nitrous oxide is liberated, but some nitrogen, ammonia and hydroxylamine are also produced.” Yet another announces that ammonium nitrate is produced, while, playing for safety, it remarks: “Zinc, under certain conditions, reacts with nitric acid to yield nitrous oxide, ammonia, or hydroxylamine.”

The boy who carried out the experiment in the laboratory found that the result depended to some extent on the dilution of the acid.

When very dilute the gas evolved was 95 per cent. nitrous oxide and 5 per cent. nitric oxide, but with a somewhat stronger solution only 20 per cent. was nitrous oxide and 80 per cent. was nitric oxide. The amount of ammonium nitrate in the liquid left increased according to the concentration of the acid. It should be noted that only one text-book as much as mentioned nitric oxide; it remarked: "Zinc dissolves in dilute nitric acid to yield ammonium nitrate, though some nitric oxide and nitrous oxide are evolved."

So much for zinc; now for aluminium. Most of the text-books stated that the reaction is so slow that it is usual to say that the metal is rendered "passive" by the formation of a skin of aluminium oxide on the surface, or that no reaction takes place. One book actually stated, in its chapter on aluminium, that there was no action, and then, in its chapter on nitrogen and its compounds, announced that when nitric acid (hot and dilute) was added to aluminium, "no hydrogen is produced, but ammonium nitrate is the main product." The author, having managed to contradict himself in his own text-book, again played for safety, and gave no chemical equation to explain what was happening.

The experiment, when carried out, showed that there was a reaction on boiling. The gas evolved was 100 per cent. nitrous oxide, and a trace of ammonium nitrate was found in the residual liquid.

Magnesium reaction

With magnesium, too, there were varying reports in the text-books. One book stated that magnesium, alone of all metals, liberates hydrogen from very dilute nitric acid. Another stated that, while hydrogen is first liberated, it reacts with excess acid, forming ammonia, nitrous oxide and hydroxylamine. A third book (which did not name the end-products) said "magnesium dissolves in dilute nitric acid without reducing it to oxides of nitrogen"; a fourth book, which gave a chemical equation for the change, stated that some of the acid was changed to ammonia, which then acted on the remaining acid to form ammonium nitrate.

The experiment showed that in great dilution the gas given off was 95 per cent. hydrogen and 5 per cent. nitrogen peroxide. At this stage there were no ammonium compounds in the residual liquid. As the concentration of the acid was increased, the quantity of hydrogen given off became less and the quantity of nitrogen peroxide increased, until, with fifty per cent. pure acid,

all the gas was nitrogen peroxide. At this stage there were considerable amounts of ammonium nitrate in the liquid left behind.

I will say little about lead, as here the main contradiction between theory and practice was that the books stated that the metal dissolved readily in dilute nitric acid, whereas the experiment showed that the reaction did not start unless there was considerable heat. Lead nitrate, which was first formed, seemed to be a sparingly soluble substance which coated the metal and prevented further changes from taking place.

It is with copper that the changes are most complex. Here most of the text-books stated that nitrogen peroxide was formed with very concentrated acid, though nitric oxide was the usual product with more dilute acid. (One text-book simply said "with weaker acid," not specifying the actual strength.)

None of the text-books mentioned nitrous oxide as being produced here; yet the boy who carried out the experiment found that with dilute acid (what is called a normal solution) the gas evolved was almost 100 per cent. nitrous oxide, with only the merest trace of nitric oxide.

A perfect demonstration

Now, I have gone into some detail about all this, since it appears to me (as I hope it will appear to many readers) that here we have a perfect demonstration of the fact that scientists are not always the absolutely sure and certain guides which they sometimes endeavour to show themselves to be. I do not say that it is not known what happens when zinc or copper dissolve in nitric acid; the experiments carried out by that sixth-form schoolboy show that these things can be worked out and an answer to many of the questions given. But all the text-books used in this piece of research were accepted authorities; they were all books which are recommended for those taking the General Certificate of Education or working for university entrance. If such authorities do not agree among themselves, what are we to think in more dubious fields?

What are we to think of the astronomers who are so supercilious about life on other worlds, not to mention the possibility of inhabitants of other worlds communicating with this one? To my mind, the answer is obvious; but whether the orthodoxy of science will ever come to admit that answer is quite another matter.

Note: I am indebted to my son, J. F. B. Rowland, for permission to reproduce some of the material which he abstracted from a wide variety of chemical text-books and articles in encyclopædias.

World round-up

of news
and comment
about recent
sightings

From all over the world reports of UFOs continue to reach this office in ever-increasing numbers. As we have space for only a small proportion, we would like to thank all our readers for sending in (and in some cases personally investigating) details of sightings which have occurred in their neighbourhood. Because some of these reports, perforce, cannot be printed, it does not mean that the effort has been wasted. All details are of the utmost importance to us, for from the totality of reports we are able to build up a global picture of the extra-terrestrial survey to which the Earth is being subjected.—
Editor.

ENGLAND:

Object hovers over lake

Mrs. Vera Bowden, 35, of Barnett Lane, Womersley, was picnicking on May 25 with her young son Nigel and Paul Foster, his friend, on Chinthurst Hill when suddenly they saw "an elliptical grey shape which appeared to be hovering over Broadwater, a lake two miles away, near Godalming."

Mrs. Bowden, who reported the incident to the police, said it was there about 18 minutes before it receded west into the distance. She said there was no noise and "It looked to me just above the treetops. It was very clear and quite unlike anything I've seen before." (Taken from *The New Daily*, May 27).

Mystery at Minsterley

An aircraft from the R.A.F. station at Shawbury, near Shrewsbury, was sent to investigate an unidentified object sighted over the village of Minsterley on the afternoon of June 2, according to the *Birmingham Mail* of the following day. The aircraft found nothing.

The sighting was reported by a police officer who said the object, about 6,000 feet high, was clearly visible. An anonymous

R.A.F. spokesman produced the inevitable conventionalisation: "It could have been a weather balloon that had gone adrift."

Green light on the Great North Road

"On the night of June 7 my wife and I were travelling down the Great North Road and just south of Retford we turned into a by-road for a couple of hours' sleep. While we were driving slowly along this road, my wife said to me: 'Did you see that?' 'Yes I did' I said. Thank goodness, was her reply."

The above is an extract from a letter written by Mr. K. R. Simmonds to the London *Daily Telegraph* of June 15, and the thing seen in the night sky at about 11.30 was a round object which glowed with a strong pale green light. It was so luminous that the atmosphere around it was light green, too. It was seen through the windscreen of the car in a gap of the clouds as it was visible for about a couple of seconds before it disappeared behind another cloud. Mr. Simmonds went on to say in his letter that "it moved or 'travelled' very fast horizontally and there was no tail to it. Its size, compared to the moon, was as a shilling to a half-a-crown and it gave

the appearance of being quite near earth."

Mr. Simmonds prefaced his letter by remarking that his previous scepticism has now turned to enquiry and he asks for a scientific explanation. We fear that he may have to wait a year or two for this: his (and other people's) scepticism has held the subject back, but the scientists are now beginning to admit the possibility of the inter-planetary saucer.

"Green moon" over Colchester

The *Colchester Gazette* of June 14 printed the following report: "More eye-witness accounts of the 'green moon' which flashed across the sky in North Essex last Tuesday (June 7) have been made. One of the reports, by Mrs. Mary Rees, of Restholme, Fairhaven Avenue, West Mersea, has been sent to a professor of the Royal Society for his observations.

"Mrs. Rees was lying in bed when she saw the bright green light, moon-shaped, streaking across the sky. She called her husband, but the light moved so quickly that it was gone before he arrived.

"Mr. Peter Head, of 9 Kimberley Road, Colchester, also saw the

object from his home. It was travelling from east to west and shone with a phosphorescent glow.

"First eye-witness to report it was Miss B. Benoist, who saw it as she was shutting up her chickens just after 11 p.m. on Tuesday. Miss Benoist thinks the object was one of the satellites circling the earth.

"Mrs. B. Jones of 15 Terling Close, Colchester, also saw the 'moon' from the garden of her home. It looked about the size of a dinner plate and flashed across the sky at a terrific speed, she said."

The Light that fooled

The London *Evening Standard* of June 28 reported a mystery light over the Channel on the previous evening as follows: "Three lifeboats went out and another stood by after a mystery light was seen over a wide area of the western Channel late last night. Ships reported the light as like a distress rocket.

"St. Peter Port, Guernsey, Tenby, Pembrokeshire, and Salcombe lifeboats put out and returned to report 'nothing found.' Penlee, Cornwall, lifeboat stood by for 45 minutes.

"A Tenby coastguard said, 'I am told a report of something similar being seen has come all the way from Valencia in Spain.' The reports differed as to the colour of the lights."

It was to be expected that the mysterious light would eventually be written off as either a shooting or a falling star, and when the usual conventionalisations were produced in a number of local papers, we asked our correspondent, Mrs. G. E. Blundell to investigate. The light was first spotted near Porthcawl in Rest Bay at 11 p.m. by a police patrol driver who, thinking it to be a distress flare, contacted the coastguard who, presumably, in turn alerted the Tenby lifeboat. A Mrs. Wheeler and two other witnesses had watched the light from her front doorstep. Her description was of a golden glow, waving in and out. She mentioned that when first seen in her

locality it was stationary. Then it changed colour from golden to red and a light (like one on a masthead, one of the witnesses added) kept up a steady "1, 2, 3 and out" flashing and repeating it all the time. In fact, the witnesses were most definitely of the opinion that the object was not a star, either shooting or falling. It is also interesting to note that Valencia, Guernsey and Swansea are in a straight line.

The Light that failed

The Southend *Pictorial* of June 10 reports as follows: "There is a mystery in Southend over a strange object which flew over the town late on Tuesday night (June 7). Mr. C. Giddings, of Ronald Park Avenue, Westcliff, was walking with his dog at 11.20 p.m. when he saw what appeared to be a satellite. He said it was visible for about five seconds, travelling swiftly from the south-east to the north-west, and gave off a greenish-violet glow.

"Miss Beverly Acock, S.R.N., of Kenilworth Gardens, Westcliff, telephoned the *Pictorial* on Thursday to say that she also had seen the object. She said she heard it as well and is convinced that it landed. Miss Acock said she saw it at exactly the same time as Mr. Giddings and that it made a whistling noise and gave off a bright blue light and left a trail of yellow light behind it. It was so bright it lit up the road and rooftops in the area."

Landing at Evenlode?

The *Evesham Journal* of June 10 reports: "Two mysterious circles, one inside the other, have been discovered by Mr. Bill Edwards, of Poplars Farm, Evenlode, in one of the fields on his farm. The outer circle is 23 feet across. Neither Mr. Edwards nor any of his farming friends can account for the circles, or recall seeing anything like them before. The circles are located in a field about midway between Chastleton and Evenlode and are far away from any roads, path or house.

"Examining the circles, one is forced to the inescapable conclusion that they could only have been made by some large round object pressing extremely hard against the surface of the field. In fact, if there were such things as flying saucers, this is just the sort of impression one would expect them to make on landing."

Newcastle-upon-Tyne

The *Journal* of June 29 makes an untypical newspaper comment on the subject of flying saucers—or is it a sign of the times that open-mindedness is beginning to spread? Under the heading "Do they fly?" the comment runs as follows: "Mr. Colin Vince, of Benwell, Newcastle, who has reported seeing a flying saucer hovering above Dunston Power Station invites the usual derision. No doubt that derision will duly descend upon him, yet the speed at which science marches these days makes his claim far less fantastic than when the first flying saucer allegedly was sighted in Texas ten years ago. For remember: science teaches that there are hundreds of millions of suns like ours; that each may have a circle of satellite planets, and that intelligent life is likely to exist on many millions of these planets."

NEW ZEALAND:

Invercargill roar

An Invercargill woman, who does not wish her name to be published, told a *Wellington Evening Post* reporter that at about 5.10 a.m. on April 5 she saw a strange flying object travelling low over the estuary towards Bluff. She had been awakened by a deafening roar and looked out to see the object which appeared circular in shape, with a number of flashing lights. Other reports of this tremendous roaring noise at about the same time were made, but no other sightings.

The woman described herself as having been sceptical of flying saucers, but is now convinced that "there is really something in it."

The object which she saw was

travelling slowly—"no faster than most cars which pass the front gate," she said. It was in sight for about five seconds. The experience left the woman frightened and shaking. A few houses down the road, three other people confirmed having heard the roar. "We are used to hearing aircraft pass low over the house from the aerodrome nearby, but this noise was much greater than that," they said.

From about two miles away, in Nelson Street, came a similar report. A man was wakened by what he described as "a loud reverberating noise." He placed the time at about 5 a.m.

Checks with the Civil Aviation Administration in Invercargill disclosed that there were no aircraft off the ground at that time. It was also stated that there would not have been any privately owned aircraft in that area at that time.

Solid Red Ball

A Napier milkman, Mr. J. Lock, reported to the *New Zealand Herald* that on June 20 he saw a solid red ball streaking through the sky at 3.55 a.m. while he was delivering milk in the Kennedy Road. "It was coming from the direction of Cape Kidnappers," he said, "and it just seemed to drop from the sky like a shooting star and rise again and disappear toward the sea. It stood out brilliantly against the sky. There was no sound of its coming, and no sound was heard after it had gone, for we especially listened for it." Mr. Lock said that he happened to be looking at the sky at the time, otherwise he would have missed it. "It was in sight for about eighteen seconds before it disappeared," he added. "All I saw was red streaks on the body, and it had a blue and green tail. It was travelling at a terrific pace."

MAJORCA:

Astronomers see saucer

On May 23 a mysterious triangular object was sighted by astronomers at the Palm Observatory.

The object described spun on

its own axis without deviating from its path and appeared about the size of a quarter moon. The Observatory said it could not have been the Soviet space-ship, since it was travelling east-south-east to west-north-west. Its velocity, altitude, and lack of noise or tail ruled out its being a jet aircraft or a balloon, the Observatory said. (Source: *Irish Independent*, May 24.)

SWITZERLAND:

The Poschiavo Valley mystery

We are indebted to Miss Lou Zinsstag for the following translation of a reader's letter from the *Der Freie Rätter*, May 24:

"An interesting phenomenon was observed during the night of May 20-21. At 10.40 p.m., when returning home, I noticed an unusually bright and large star just above the little church of San Romero in the Poschiavo Valley. I had never before seen this star so therefore I went for my binoculars. I was much amazed to see the 'star' suddenly move in all four directions, rather like a child's balloon driven by a light wind. Then the 'star' started changing its shape. It grew longer at its downward end and slowly changed into a cigar-shaped object with its point raised. The upper end slowly reddened and in the middle of the 'cigar' a dark circular shadow came into view. Now it looked exactly as if the lower part separated itself from the upper part which gradually grew darker.

"After approximately two minutes, the same 'star' reappeared slightly to the west. Now it started glowing in all colours of the spectrum and—as seen through the binoculars—it looked like a beautiful snow crystal. Again it started to change shape. Soon the upper part looked like the thinner end of a Zeppelin. The lower end also prolonged downwards until it grew as thin as a brightly glowing bar with a twinkling star at its end. The thing now started moving round its axis, changing also its perpendicular position, but glowing for a long time in

the same beautiful colours. After a while it steadied itself again in the former perpendicular position and suddenly disappeared completely.

"However, after some time the upper 'star' (the larger one) reappeared. It got broader and broader until once again it assumed its former cigar shape, but in a horizontal position. After a while this changed again and the object started moving up and down and from right to left, as it did on the previous occasion. After a while, the lower part showed something like two fins on a fish. The fins were visible for only a short time. The performance again suddenly stopped and the object disappeared. But yet again the 'star' reappeared! This time it was more to the west. But from its new position it was suddenly driven, as if it was shot, back to the east and its former position. I followed the phenomenon until 3 a.m. At that time the object finally disappeared behind a mountain range. A Conzetti."

MOZAMBIQUE:

Four little spacemen

The *Times of India*, published in Bombay, reports that a flying saucer manned by "four little spacemen" had landed in Mozambique, East Africa. The *Times of India* quotes Lisbon papers of April 7 and referred to the Portuguese news agency Lusitania as the source of the information. The despatch from this agency stated that inhabitants of Beira, on the Mozambique coast, had seen an orange saucer-shaped object in the sky emitting a sharp whistle. It landed a few seconds later and soon afterwards was destroyed by a loud explosion, the inhabitants said, adding that they had seen four small creatures of human shape running away from the machine.

We quote in good faith from the *Times of India*, but we have been unable to trace any other report of this extraordinary sighting. We should be grateful to any reader who can add to our information on the matter.

Flying saucers are becoming respectable

Two critics in retreat

THE two severest critics of the interplanetary saucer have been Dr. Menzel in the U.S.A. and Chapman Pincher in England. The former has, perhaps, carried the greater weight in scientific quarters, but the latter has reached by far the wider public by reason of being the Science Editor of the London *Daily Express*, which claims a 4,000,000 circulation and a 12,000,000 readership. It should be explained that both these critics took very much the same line in dealing with UFOs. Whatever the evidence, they were always something conventional. Saucers, as such, did not exist.

It is something of a coincidence that both these sceptics have recently been obliged to change their tune. Dr. Menzel was forced to admit in a TV interview with Donald Keyhoe that he did not have detailed U.S. Air Force reports when he labelled many UFOs as mirages and illusions. The interview also revealed that the noted astronomer Dr. J. Allen Hynek had referred to Dr. Menzel's treatise on saucers as "not a serious study."

Remarkable conversion

Chapman Pincher, to whom we referred recently as the arch-debunker of saucers, has undergone a much more remarkable conversion, for he has been subjected to no such pressure: his conversion seems to be due entirely to the change in the climate of scientific opinion.

In the *Daily Express* of June 16, Chapman Pincher contributed an article headed "Flying Saucers are becoming respectable." He opens his article by remarking that the Astronomer-Royal, Dr. Richard van der Riet Woolley, has reaffirmed his belief that "space travel is utter bilge." Dr. Woolley sought to reinforce his opinion by stating that "the surfaces of the moon and the planets are so inhospitable that there is no question of living on them." To this assertion Chapman Pincher replies: "I say that Dr. Stay-on-the-Ground Woolley is in danger of finding himself sole holder of this belief five years from now." Coming from Chapman

Pincher, this was remarkable enough, but better was to follow.

"The performances of the Russian and U.S. moon-shooters have already confounded him," Mr. Pincher went on. "Now the possibility that other worlds may be watching us is being seriously considered by scientists as reputable as Dr. Woolley. . . . What is even more surprising is the fact that these speculations are being published in leading technical journals such as the highly academic *Nature*. What has happened to make reputable scientists admit that even the concept of the 'flying saucer' may not be 'utter bilge'?"

Three impressive events

Chapman Pincher traces "this exciting possibility" to three events:

1. "The probability that life exists on other planets is now accepted because of the evidence that the entire universe is composed of the same types of earth atoms."
2. "Research on proteins has shown that wherever living matter has arisen it is likely to have evolved along lines broadly similar to those on earth because the arrangements of atoms capable of producing life are restricted. This suggests that any creatures intelligent enough to communicate with us are more likely to be near-humans than bug-eyed monsters."
3. "The tremendous advances in space-flight have proved the feasibility of robot and even manned travel to and from other worlds."

To the third point just quoted, we would add that one of Dr. Woolley's objections to space travel can be ascribed to his effort to save face. He falls back on the prohibitive cost. It is true that the shooting of rockets into outer space is a costly undertaking, but surely it must be admitted that these are but our first steps. Sooner or later we shall discover some more efficient method of propulsion: Man so far has conquered his technical problems in every new advance he

has made. Indeed, if the existence of flying saucers can be admitted into current scientific thought we could be half-way, at least, towards the solution.

Surprises in store

Chapman Pincher must have felt that he had gone too far, for he applies the brake towards the end of his article by remarking that, while claims have been made of contacts with saucer pilots, "no authentic physical evidence to support the existence of spaceships from other worlds has yet been established." We would beg

to differ and also to point out that as scientific opinion hitherto has flatly rejected *all* evidence it is hardly in a position to make such a dogmatic assertion. In any case, when does evidence become "authentic"? When, presumably, the saucers have become completely respectable. That day is obviously approaching even faster than at one time we dared to hope. When it arrives, even saucer enthusiasts will be surprised how evidence that was once suspect can become "authentic." We would like those most vehement in their opposition to contact claims to bear this point in mind.

The Hunt for Planetary Life

MORE NEWS OF OZMA

IN the March/April issue of *FLYING SAUCER REVIEW* we quoted from an article in the *Christian Science Monitor* reporting the latest developments in the newest form of space probe—the search for extra-terrestrial life. The same newspaper of April 4 returns to the subject and its natural science editor, Robert C. Cowen, reports further on the project launched at the National Radio Astronomy Observatory near Greenbank, W. Va.

The project was christened Ozma and is led by Dr Frank D. Drake. The equipment he uses, it is claimed, is sensitive enough to pick up the ignition noise of an automobile on Mars. However, the two stars he plans to study first, Tau Ceti and Epsilon Eridani, are much farther away, 11 light-years to be specific, but radio broadcasts beamed into space by intelligent beings would be very much stronger than the noise generated by spark plugs.

Dr Drake concedes that there is but a slim chance that such beings would be sending out messages specifically to try to contact other worlds themselves. Dr Drake, however, points out that there is a good chance that they would be communicating with artificial satellites and space ships, or using radar to probe their "sun" and any other nearby planets.

In studying these first two stars, Dr Drake will point his telescope both at the objects and at the space nearby in order to see if there is any unusual radio noise associated with them. Then he will analyse any noises he receives for artificial patterns that would indicate intelligent broad-

casts among the naturally generated radio noises.

If nothing positive is gleaned from this first attempt to pick up messages, this will not spell the end of Project Ozma. A negative result will not discourage these pioneers: the search will begin again as soon as more powerful equipment is ready to study more distant stars.

Dr Drake was asked what would happen if intelligent broadcasts appear to be detected. Dr Drake replied that then he would have a stiff problem on his hands. He explained that with 11 light-years (63 million million miles) of interstellar space to cross two-way communication would be difficult. It would take 11 years for a "hello" from the earth to reach the planet in question. Another 11 years would be required for the planet's reply, if its inhabitants detected the earth's signal and responded. Thus, 22 years would be the minimum for communication to be established, and might well take a good deal longer. "One cannot expect too much along that line," Dr Drake added, "whatever the success of Ozma, but the impact on men themselves of the discovery of intelligent life on another world would be profound. It is difficult to foresee how this would affect philosophies, religions, even men's attitudes and behaviour toward their fellows. But the eventual ramifications would be far reaching."

We have a suggestion to make to Dr Drake. Instead of listening to the remote Tau Ceti and Epsilon Eridani, why not concentrate on that sparking plug on Mars?

Unidentified flying objects 1947-1960

— *the limits of evidence*

by W. H. WATSON

In our May/June issue we introduced Mr. W. H. Watson as the nearest approach to a downright sceptic we could find to contribute to our columns. The complete sceptic, we have realised, is one who has either never studied the subject or has approached it with a closed mind. Mr. Watson is neither a downright sceptic nor an enthusiastic supporter of much of what has been claimed on behalf of the flying saucers. We print his article, therefore, as we believe it is most important that all the evidence should continually be subjected to the severest criticism.

THIS brief survey is not intended as a proof, one way or the other, that the so-called flying saucers are alien spacecraft. Herein are set down the details which are *known* to be true, or in some instances false, about UFOs and the conclusions which can definitely be drawn therefrom. Irrelevances and the wishful thinking of the average enthusiastic believer have been dispensed with in order that facts only remain. Actual incidents and proofs indicating a given fact have also been left by the wayside, for to include them all—or even the few best ones—would render this thesis quite unmanageable, involving multitudinous and distracting digressions. It is to be hoped, however, that the reader will believe that such, in fact, do exist in the history of the UFO.

There is now a 100 per cent. certainty that flying saucers exist: but what are they? (This question is directed particularly at the sceptic.) Consider the following and then decide.

The largest recorded

The normal diameter of a flying saucer is about 45 ft. The largest ever recorded was in the region of 350 ft. across; there is absolutely no verification for claims that they reach sizes of several thousand, or even hundred, feet. They are, within

reason, of approximately similar dimensions to terrestrial aircraft.

Principal among UFOs' characteristics is the strange ability to change colour, seemingly at will. Why they do this no-one knows, although many (including the present writer) have proffered engrossing—though unproven—theories. One pointer to the discovery of the reason is undoubtedly to be found in a comparison of the colour changes of the body of a UFO—which, when clearest, is a shiny silvery colour—and those of its "exhaust," should it leave one: they are practically (though not altogether) opposite to each other, apparently suggesting that the motivating energy of such an object is sucked in through the main body and is subsequently expelled via the visible discharge. This idea, although admittedly an hypothesis, is well supported from documented observations.

Almost inaudible

Sometimes a UFO has been reported to have vanished "... like a light being switched off." There is, as yet, no satisfactory explanation for these extraordinary occurrences. They merely add up to another unaccountable characteristic of the phenomena.

Sound is not often to be heard from UFOs. In a

few instances, when the object was extremely close to the observer and usually hovering, a strange noise has just been audible. The sound seems to be in the nature of a vibratory hum.

In other cases UFOs have been heard breaking the sound barrier. The sonic boom thereby created is very often devastating—far more so than that of an ordinary aircraft. This is the first indication that UFOs are solid.

A further indication that they are "gigantic and metallic" is in the small number of radar, and radar-visual, sightings which have escaped the Governmental net and been gathered in by the popular press. But even here there is an element of confusion: while UFOs seen from the ground or air may be detected on radar as metallic 300-ft. objects, there is no guarantee that they will be. Very often they remain *undetectable* to the radar-scope.

Radar has been extremely helpful, however, in determining the velocity at which UFOs travel. The result? A maximum recorded of *at least* 50,000 *m.p.h.*! This is double the earth's velocity of escape and almost rivals the speed at which we are revolving round the sun.

One exceedingly odd aspect of UFOs (and the one which is of most interest to those trying to discover their nature) is their apparent ability to combat gravity and inertia as though these were non-existent. The violent manoeuvres, sudden halts and fantastic rate of acceleration of UFOs, argue the sceptics—not without cause it would seem—nullify the possibility of their being solid entities. However, placed on a parallel with the sonic bangs and solid radar targets, such an objection is apparently invalid.

Those landing reports

There have been reports of flying saucers actually having landed on earth. In the vast majority of cases—the more lurid ones especially—there is little or no evidence for the reported touch-down. In a very small number of instances, though, it has been established that a UFO did alight upon the surface of this planet and subsequently took off again. Many people—responsible people—at a time have witnessed landings, therefore ruling out the possibility of hoax, and occasionally marks have been found on the ground where the object was supposed to have been sitting. But the UFOs are almost always said to be nothing but large lights with no structural features, or, indeed, any distinguishing features at all, being visible.

Sightings generally, let alone landings, are very rare and, of all the UFOs seen, a mere 5 per cent. or so are genuine flying saucers; a meagre frac-

tion per cent. being good reports with any detail. Unfortunately, as a rule, only aircraft pilots have the good fortune to make detailed observations and, because of official suppression, their stories seldom leak out to the ears of the general public. It has been estimated, incidentally, that only about one per cent. of the world's population ever see a UFO, but eleven per cent. of astronomers see them. In this connection, objects resembling UFOs have been observed near Mars and Venus on occasion and on the Moon relatively often. Of course there cannot be any certainty as to whether or not these apparitions are UFOs but, if saucers can exceed escape velocity, there is no reason why they should not be UFOs. Such spatial objects are described in the same manner as are most subaerial UFOs: small white or silvery lights moving across the field of view.

Not from another sphere

There is no evidence whatever that flying saucers are spacecraft from another sphere—only circumstantial evidence drawn from known details: hardly the kind of concrete proof required by confirmed sceptics, although quite sufficient to sway those who tackle the subject with an open mind—but, at the same time, they are definitely not terrestrial craft; nor are they any known form of natural phenomena—even a hitherto unknown natural phenomenon accounting for the appearance and behaviour of these mysterious flying objects is virtually inconceivable (*although the possibility cannot be ruled out*). These are points which cannot be too strongly stressed.

An extremely important aspect of the objects lies in their shapes. The forms they take are known in some detail from the very few good reports on record. They are usually flat discs with what appears to be a curved dome top and bottom, although other forms—notably semi-spheres, cones and wing-shapes—are fairly frequent. There is also a substantial amount of evidence for the existence of cylindrical shapes. They repetitively exhibit geometrically arranged circles which normally appear dark on their bodies (occasionally they are bluish-white or reddish-orange) and are generally taken to be portholes.

Flying saucers are more frequently observed over Brazil—central and southern areas particularly—than over any other country. Yet again there is no known reason. (In addition it is perhaps convenient to note here that South-West Scotland—around the Newton Stewart district—is a habitual recipient of concentrated visitations.)

UFOs emit a degree of radioactivity and cause considerable electrical interference when close to radios, television sets, compasses, motor-cars, aircraft, etc. Moreover, their "exhausts" generate a temperature in the region of 300°F., which has been known to burn some people severely who were too close.

The age of the flying saucer is not known. Some researchers believe sightings go back at least to A.D. 1290, even to pre-Roman times. Once again there is no certainty such ancient observations were of saucers as they could have been of some form of natural phenomena with

which we are now familiar. True sightings can only be said, with any certainty, to be traceable back over the century or so preceding the time they came into a somewhat doubtful prominence. The good sightings which are occurring at the present time date only from 1946-47.

Are UFOs Martian, or from another solar system, or are they just manifestations of nature? I do not think we shall be able to say until one touches down outside the Houses of Parliament, the White House, the Kremlin, or wherever it chooses to go, and someone, or something, gets out to tell us.

MAIL BAG

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

David Wightman answered

Sir,—We of the Adamski staff are too busy working with constructive material that will benefit mankind to answer the senseless non-factual accusations of the critics.

There is not one statement in Mr. Wightman's article in the May/June issue of the FLYING SAUCER REVIEW that has even a small grain of truth in it.

Alice K. Wells,
Star Route,
Valley Center,
California, U.S.A.

Subscribed and Sworn to before me this 7th day of June, 1960.

Virginia Eslick, Notary Public in
and for the County of San
Diego, State of California.

Space Animals

Sir,—Many of your readers must have connected Trevor James's remarkable article on space animals with the picture of the Liebnitz Spider both of which appeared in the July/August

issue. It would certainly seem that the spidery object looks much more like a space animal than an inter-planetary and constructed machine. The emanation of heat was another feature which Trevor James mentioned as often accompanying the objects whose existence he claims to have discovered.

As a result of the coincidence of the article and the photograph in the same issue, it does begin to look as though we must open our minds wider still and accommodate two sky phenomena as having given rise to reports from all over the world. I happen to think that this will help us greatly towards a solution to both the mysteries, for I am certain that, if I am right, much of the confusion already caused may be cleared out of the way.—H. L. Waite, Chichester.

Sir,—With reference to Trevor James's article, may I direct your attention to the account given by Frank Smythe in *Everest* 1933 by Hugh Ruttledge (Hodder &

Stoughton) of the pulsating blimp he saw over the North Col? It might be worth reprinting *in extenso*.

May I also take this opportunity of congratulating you on the firm character of the Review?—Michael Scott, London, S.W.1.

Sun Spot

Sir,—With reference to the report in the July/August *Review* from Mr. D. R. Hickman of Hayes, Kent, regarding the sun-spots, I also saw one large spot.

I am almost certain that this occurred on April 30 but in my case the time would be a little before 7.30 p.m. The spot was readily visible in spite of the fact that the sun's glare was somewhat dampened by cloud and haze. It was positioned to the lower right as in the illustration but a little more to the left of the lower spot in your illustration. My wife and I watched it for perhaps two minutes during which time it did not appear to move.

I continued to look up as we went on our way for a minute or

so until the clouds obscured the sun. It would appear that in view of Mr. Hickman's report we saw the first of the three objects passing across the face of the sun or a very large sunspot. No doubt you will receive further reports about this matter.—H. H. Parker, 40 Thoresby Dale, Hucknall, Notts.

Carol Honey

Sir,—It is all very well for Mr. Honey to explain his inability to tell us more about the "space people" on the grounds that they do not want us to know who they are or where they are. "To reveal the location," he writes, "would mean endangering their lives." Even if we were to allow the truth of what Mr. Honey writes, has it ever occurred to him that in those circumstances it would have been better for him to have kept his mouth shut? He won't be believed; he has furthered no cause, and he must have irritated a number of readers by hinting at so much and revealing so little. If space people really are amongst us and trying to put over some message, then Mr. Honey should tell them that they are going the wrong way about things.—M. E. Hennesey, Norwich.

The Adamski Challenge

Sir,—May I reply to Waveney Girvan's challenge? In the first place, I want to make it clear that if I am sure there cannot be human-like beings on Venus, it is not really because what we know about Venus (which I agree is little enough) shows it to be different from earth, but above all because of what is known about biological evolution. This shows infinite variety on earth, but nevertheless accords strictly with biochemical laws which are valid for the whole universe. These laws teach that man is the product of a vast number of chromosome mutations extending over three billion years; that each of these mutations is the product of chance like a lottery number and to suppose that elsewhere (on Venus or any other place) beings resembling men are to be found means billions of dice throws have been identical—which is infinitely improbable, indeed impossible.

As for photographs: there are already a number of close sightings of flying saucers, as well as authoritative photographs. These photographs and sightings are more or less clear, but certainly very different from those of Adamski. I have photographs exactly resembling the sketches

by Father Gill—those are the real flying saucers, as best attested by numerous witnesses. There are several types of flying saucers.—Aimé Michel, Vanves, France.

(Waveney Girvan comments:

If M. Michel will refer to pp. 9 and 28 of this issue he will find that some scientists, at least, are now of the opinion that if intelligent life exists elsewhere it is likely to have taken human or humanoid form. What is a poor layman to think when faced with such conflicting—and dogmatic—assertions? As for the photographs, I do not dispute that there seem to be a great variety of saucer shapes, but I was dealing, of course, with the Adamski type. This shaped saucer has been clearly attested to by a number of English witnesses, Darbishire, Potter and Salandin, to name but three. M. Michel does not believe that Adamski's photograph is genuine, but fails to explain the grounds for his disbelief. After having listened most carefully to the worst that Adamski's critics can say I would like to go on record with the opinion that the authenticity of his photographs has withstood all the attacks. Furthermore, I think the critics have put forward a very poor case.)

In our next issue . . .

N. E. G. Cruttwell contributes a survey of recent amazing happenings over Papua accompanied by testimony and sketches from a number of eye witnesses

Gravity Research

Foundation-

1960 awards

THE trustees of the Gravity Research Foundation, Boston, New Hampshire announced that the following had been awarded the prizes for their essays in their 1960 competition:

(1) \$1,000—"Gravity and the Nature of Fundamental Particles" by Professor Lloyd Motz of Columbia University, Rutherford Observatory, New York.

(2) \$300—"The Importance of the Noon-Midnight Red Shift" by Professor Banesh Hoffmann of the Department of Mathematics, Queen's College, Flushing, New York.

(3) \$200—"On the Question whether Fast Motion or Fast Rotation or Vibration of an Object can Decrease the Effect of Gravity on it" by Dr. F. J. Belinfante, Department of Physics, Purdue University, Lafayette, Indiana.

(4) \$150—"Can There be a Shield for Gravitation?" by Dr. W. F. G. Swann, Director Emeritus, Bartol Research Foundation, Whittier Place, Swarthmore, Pennsylvania.

(5) \$100—"Plant Form and Function Depend Greatly on

Gravity" by Professor Charles J. Lyon, Department of Botany, Dartmouth College, Hanover, New Hampshire.

Honourable Mention was made to:

Professor Bryce S. De Witt, the University of North Carolina, Chapel Hill, for his essay "Gravitational Research: The Coming Decade."

Mr. John O. Stoner, Jr., Palmer Physical Laboratory, Princeton, New Jersey, for his essay "Generation and Detection of Gravitational Radiation."

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Flying Saucers and the Straight Line Mystery

by AIMÉ MICHEL

*With a foreword by General L. M. Chassin, General Air Defence Co-ordinator,
Allied Air Forces, Central Europe (NATO)*

Owing to an exceptionally heavy demand, our initial supplies of this epoch-making book were sold out early on the day of first release in the United Kingdom. We have now made arrangements for further supplies to be imported from the U.S.A. We still advise those of our readers anxious to obtain copies, to make certain of placing their orders as soon as possible, as the demand continues to be heavy.

Readers living in or near London can obtain copies of the book at the John M. Watkins Bookshop, Cecil Court, off Charing Cross Road, W.C.2, for 30s. per copy.

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"I want to pay tribute to the Civilian Saucer Intelligence, responsible for the English translation, for their significant contribution to the cause of truth in the study of UFOs. The book is outstanding." Professor Charles A. Maney, in a public lecture on March 14, 1959, quoted in the FLYING SAUCER REVIEW.

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