

# A TEN POINT RESEARCH PROPOSAL

## An Open Letter to UFO Researchers

by Jacques Vallée

**E**XACTLY twenty years ago, in the Summer of 1946, the first massive series of observations was made, over Sweden, of what has become known as the UFO Phenomenon. For two decades we have witnessed its development, and our puzzlement has received no answer. Every attempt at interpretation has been caught between two extremes: the belief that the objects, unusual as they may seem in behaviour and in appearance, must be conventional in nature, and the belief that the phenomena are controlled by an intelligence from outer space. The first theory is said to be true *a priori* because it is unthinkable that extra-terrestrial civilisations could travel to our planet. The second, to be "evident" from the observations. Presented in such terms, both theories are extremely distasteful to the rational mind. The first one, because it fails to represent the observed facts; the second one, because it is only a hastily conceived and superficial answer designed to conceal our ignorance, and meets none of the criteria for a scientific theory.

It is time for us all to come to a clear realisation of the fact that **there is no substitute for science**. For twenty years, because official science has remained silent on the problem, or has chosen to ignore its potential impact on human progress, we have had to develop our own terminology, to design new methods, to establish a data-gathering network which covers the whole planet. Some of us have applied to the problem the techniques of the historian, of the archaeologist, of the philosopher, of the mathematician: not because this was their job, but simply because they felt "somebody had to do it". Today we can look critically at what has been produced: because we have worked without official support, we have been free of the censorship and of the pressures which are commonly exerted, in all countries, on scientific researchers. But we have never had at our disposal the full power of the scientific apparatus. Today, as our efforts are close to obtaining official recognition, we are still unable to present a coherent theory of UFO Phenomena. Our results are fragmentary and many potentially rich fields of research have remained unexplored.

I submit that this situation is typical of any

new field of science whose development is due to the work of enlightened amateurs. The word "amateur", here, should not be misinterpreted. The development of Aviation, of Radioastronomy, of Electromagnetism, of Rocket Technology, has been the work of amateurs. We should realise, however, that the efforts of these pioneers have come to be recognised as important contributions only because they have known **how to integrate their knowledge in the main stream of science at the proper time**. I believe UFO research, imperfect as it is, stands precisely at that same point; and that it is time for us to see that there is no such thing as "our science" as opposed to "science" in general. There is only thing known as science, and **it is the exclusive property of no chosen group of men**. Science belongs to everybody. What professional scientists say and write does not necessarily bear the stamp of Science. And what non-scientists like Edison, Tsiolkovski, Gramme or the Wright Brothers say and make, often does.

For far too long have most of the contributors to this publication looked at science as outsiders. Too long have they accused the scientists for their ignorance and their inertia in dealing with UFO phenomena. Those who have the data also bear the responsibility for studying them and presenting them. And we have data, dormant in our files, which are far better than those any observatory, or any Air Force, has ever had on the UFO phenomenon. Therefore it is our responsibility, and **that of no other group**, to undertake active research on these data, and we have no reason to await word of official approval. The Wright Brothers did not apply for a flying licence; Edison asked no special permission. They just did what they felt was right, and only they could do it.

In order to support my proposition that UFO Research has become nothing more and nothing less than an ordinary field of science, I have listed ten problems which can be expected to find complete solution by application of conventional scientific techniques (i.e., problems which do not require the development of new methods and do not pre-suppose new discoveries in other fields of knowledge). These ten points do not include the very difficult and intricate questions such as the analysis of the landing reports or the estimate of

possible correlations between UFO phenomena and the martian cycle: I have chosen only basic technical problems in the area of observation, data-gathering, classification and retrieval. The solution of these ten simple problems is essential for the future development of UFO research on a solid basis. And our past failures have largely come from insufficient preparation and *documentation* in these ten areas. I also want to emphasise that no theory of the UFO phenomena can be anything but a fancy of the imagination unless these ten basic problems are solved first.

**Problem 1.** Develop an information-retrieval system for UFO data. That is, some system which permits swift and accurate acquisition of the circumstances of any observation, and will serve as a basis for statistical studies of the reports.

**Problem 2.** Discuss and improve the existing codification/classification systems for speedy indexing of large quantities of sightings. Reduce all American observations (including the Air Force files) to an homogenous format, with the objective of producing within two years a catalogue of approximately three thousand sightings in machine-readable form.

**Problem 3.** Compile a serious, exhaustive bibliography of observations of unusual aerial phenomena published by professional scientists in the eighteenth, nineteenth and early twentieth centuries.

**Problem 4.** Reprint in *extenso* and *without comments* other than bibliographical information, and in *straight chronological order* all accounts of popular observations of UFOs prior to September, 1939, beginning of the Second World War.

**Problem 5.** Gather precise accounts of "foofighters" observed over Germany and the Pacific during the Second World War. The only efficient method to obtain these data is to contact War veterans, either through personal acquaintance or through their organisations, in all countries.

**Problem 6.** Translate and reprint in straight chronological order all available documents pertaining to the 1946 Scandinavian wave which is very poorly known.

**Problem 7.** Organise networks of amateur stations equipped with short-wave radio transmitters whenever possible, for swift recognition of trajectories of unusual objects. In addition, these networks could play an important scientific role in tracking meteors and satellites, if their crews were properly trained. It would be advisable to design, experiment and possibly mass-produce simple recorders of electro-magnetic disturbances which could be distributed and operated by these

networks, in order to ascertain the frequency of unusual variations in the electromagnetic field, which may have highly significant scientific value, in addition to a possible link with UFO phenomena.

**Problem 8.** Analyse critically the reporting procedures and the questionnaires in current use in various nations. Compile observation on the best ways of interviewing witnesses of unusual aerial phenomena, and train teams of field investigators in the use of these techniques.

**Problem 9.** Conduct a serious study of sociological patterns linked with the UFO phenomenon, in an effort to ascertain the real or imaginary character of a danger of "panic" in the event of massive UFO activity. Make an estimate of the role that could be played by organised, responsible UFO groups, and by government authorities in the event of such socially disruptive movements.

**Problem 10.** Reorganise UFO Research on a local scale in countries where it has remained dormant, or where it has collapsed because of conflicts of personalities. Prepare a world-wide list of responsible organisations and journals that have demonstrated sincere motivation and a serious, scholarly and non-sensational approach in its study of the observations.

I am not unaware of the fact that all of these problems, at one time or another, in one country or another, have been studied by careful researchers and that some of them have even received preliminary solutions. These ten problems have been selected *precisely* because some experience was already obtained on the best way of approach. None of them, however, have been completely solved, although 1 and 2 are close to completion. Some, like 3, 4 or 6, would require only careful bibliographical work for a period of a few months; they involve essentially the centralisation and ordering of existing documents.

Others demand well-organised teams of specialists with access to data-processing machines, e.g., 1, 2, 9. Some, such as Problem 8, require access to official files and inside knowledge of reporting procedures. Problem 9 can be solved only through official support and funds, and an effort to obtain such support is now being made. But all other problems require no such official approval, and they could have been solved long ago by groups of amateurs seriously dedicated to research. Problems Nos. 5, 7 and 10 require not only individual action, but serious and deep organising effort, and they clearly pose a challenge to the existing UFO groups. Through this challenge, we will be for the first time in a position to test the

real efficiency of these groups.

In conclusion, I believe that UFO researchers have too long been barred from an objective and fruitful appraisal of the facts, not by official secrecy or the inertia of professional scientists, but by their own narrow theories and their lack of realism. They have been plagued by uncritically accepted rumours of crashed saucers and of military machiavelism, and they have wasted most of their energy in imagination instead of constructive analytical work, as if hard and steady pursuit of the facts could be avoided by the mere exercise of intuition; as if proof was unnecessary, as long as the gleaming illusion of "evidence" was available in shiny packages. They seem to have

thought: "surely, if I dream hard enough, I can find the key to this problem without going through all the hard work." And too often they have taken the initiative to reduce and narrow their activity to a mere debate of believers versus non-believers: no wonder it has attracted little attention from the public, and has been ignored by the scientific community!

A phenomenon exists which is unexplained. It must be studied. There are ten problems which need solution before any theory of UFO phenomena can be reasonably presented. The key to the mystery of the nature and origin of UFOs is not within reach at the present time. The solutions to these ten problems are.

# GRAVITY - AND THE QUASARS

by C. Maxwell Gade

WHEN radio astronomy first got seriously under way in the early 1950s, it was widely believed that "radio stars" were some new sort of object, like stars, but giving off no visible light. Later, it became clear that most of the radio sources were situated at such immense distances from the Solar System that they could only be seen as the faintest wisps of light even when they were, in fact, the size of a whole galaxy. The big difficulty in those days was the poor angular resolution of the available radio telescopes, which made it almost impossible in many cases to identify a radio source with any visible object. As radio astronomy developed, refinements in technique for the accurate location of the direction of radio sources, and for identifying objects seen on optical photographs with the sources of radio emission, not only enabled astronomers to locate with certainty many radio sources in our own Milky Way Galaxy, but even sources in other galaxies—many millions of light-years distant. Still more important, the observations led to a number of remarkable discoveries, of which the "Quasars", or quasi-stellar objects, are by far the most outstanding.

In 1961-1962, very accurate measurements made at the Cambridge Radio Astronomy Centre, and also at Owens Valley in California, led to the discovery that three of the very distant radio sources were associated with objects that looked more like stars than galaxies. These quasi-stars exhibited intense ultraviolet radiation, and peculiar optical spectra that astrophysicists simply could not understand at all. Observations made by the

"lunar occultation" method—observing the eclipse of a radio source by the Moon—which gives extremely accurate measurements of direction, were made at Parkes (Australia) in November 1962. These measurements showed that the source known by the catalogue number 3C273 had two emitting regions, each smaller than 1 second of arc, and separated by about 20 seconds of arc. One of these regions coincided with a faint star, which also showed intense ultraviolet emission and an incomprehensible optical spectrum. Eventually, Dr. M. Schmidt, at Mount Palomar, showed that the spectrum could be recognised if one applied a red-shift corresponding to a distance of fifteen hundred million light-years. Still unexplained, was the fact that this "star" was at least 100 times too bright for even an entire galaxy at such a vast distance.

Up to August 1965, a total of 44 of these strange objects had been discovered, and they produced a revolution in astronomical thinking. The intensity of radiation from these sources is far too great to be accountable for in terms of thermonuclear energy, and no really satisfactory explanation is yet in sight.

At the Royal Institution, on April 29, 1966, Fred Hoyle gave an account of the Quasars and the effect which they have had upon our ideas of cosmology. He pointed out that there are four possible explanations of the extraordinary red shift:—

1. A true Doppler Shift, due to a genuine velocity of recession in a universe of Euclidian geometry.