

time, but the UFO subject came up easily and without pressure from me.

Once again he was a very 'earthy' young man, simply educated and not a reader of anything more than the sports page of the daily paper.

I asked him if he'd come across anything out of the ordinary during his time in the services, and he laughed and replied "apart from my mates there's just one experience I had which changed my life and outlook forever, and I realised that if my superiors had been aware of what I had seen, I would have been in trouble - I just wanted out, man, I didn't want to think about it!"

Again I plied him with more beer and my best friendly enquiring attitude, promising him it would go no further than my report to FSR, and I would never disclose his real name.

This time I did not get the year exactly, but I understand it was mid-nineties and that he was called to duty with several other divers to find an 'aircraft' that had come down in the sea off the Norfolk/Suffolk coast.

He and his pals made three dives, but the bed of the sea was churned up with so much mud and silt, it was impossible to see anything, although they were equipped with up-to-date underwater lighting equipment.

He asked his superiors a couple of hours later if he could try one more time, and as he was the most experienced diver of the team, was allowed to do so.

Visibility had improved greatly in the area and 'Bill' could make out a vague shape, and approached nearer. On approaching the aircraft he then realised that what he was seeing was a disc-shaped object partly imbedded in

the ocean floor at an angle of about 25 degrees, about 130ft down, and with what appeared to be a translucent dome on top, which was covered in mud and weed but definitely not a conventional aircraft.

Suddenly he said I got "spooked" - a most terrifying feeling came over me and, believe me Pete, after what I've been through, I'm afraid of nothing!! I just got out and up as fast as possible - reported to my superiors that there was some kind of aircraft down there, and gave them the exact co-ordinates for retrieval. Feigning exhaustion he returned to his base.

A few months later he discharged himself, or was discharged - I'm not sure which, due to migraines and general sickness - he is very thin and at 20 something is greying and balding-and looks nearer 45! He also told me that many of his colleagues had recounted all manner of bizarre encounters world-wide.

It seems to me that if it were possible to question every member of the armed services in every country of the world from 1940 onwards, we would have stories which would not only amaze us, but would probably crack the UFO controversy once and for all.

In both cases I felt it was a great relief for the men to unburden themselves.

I hope all this is interesting information to your/our readers. Would anyone else from the services volunteer any information? Strict confidence etc - please contact us at FSR. ■

ELECTROMAGNETIC GYROSCOPIC PROPULSION (PART II), © BY KEN MORTIMER, FSR Consultant and Amateur Astronomer.

Last year the editor of Flying Saucer Review kindly published an article of mine in the Summer edition, volume 47/2, 2002. The purpose of that article was to convey the idea that any propulsion system based on electromagnetic drive must propel itself through the electromagnetic fields of stellar objects and planets that also possess an electromagnetic field, in order to be able to fly, or move through space.

The purpose of this present article is to indicate how such gyroscopes might work, and to give some idea of how they might be designed. The inspiration to come up with these ideas stems from a knowledge of astronomy, and an analysis of the empirical evidence that surrounds the UFO phenomenon.

Readers of FSR will have noticed that a Seymour Newman wrote in, (FSR vol. 47/4) suggesting the use of solenoids with iron cores instead of gyroscopes. That would be fine if a disc of E.M. energy could be created by this method.

I will briefly discuss two other possible methods, before going on to the E.M. gyroscopic design. One of them, however, I am sure is way beyond mankind's understanding of physics, but may be being used by our

visitors, wherever they might come from.

A few years ago, Nick Cook presented a documentary on Channel 5 television, called *The Billion-Dollar Secret*. At the time Nick Cook was the Aviation Editor of James' *Defence Weekly*.

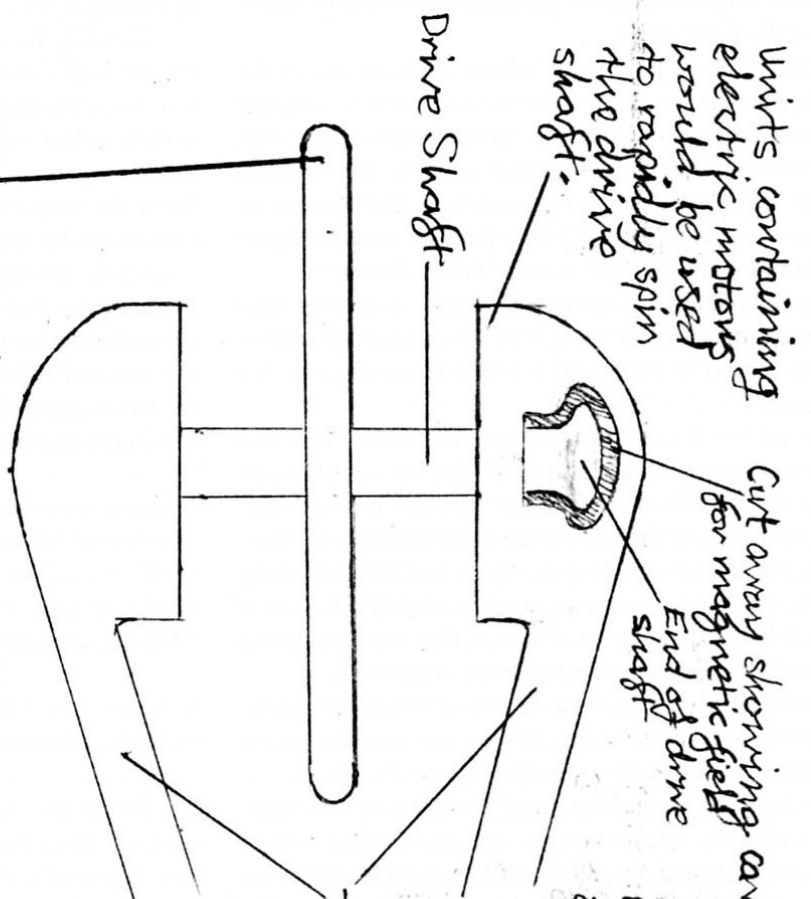
The documentary was concerned with the Black Budget projects of the U.S. military industries. During the programme Nick Cook interviewed a former leading scientist of Lockheed-Martin, by the name of Boyd Bushman.

Boyd Bushman discussed an experiment he carried out using two magnets. Bushman clamped the two magnets together by their positive polar ends. The result produced a magnetic field of energy that he had not seen before.

He then carried out an experiment that entailed dropping the magnet-pair at the same time as another object, from a considerable height. He discovered that the magnet-pair fell with a different acceleration from that of the other, reference-object.

This suggests to me that that the magnetic field of the two clamped magnets was interacting with an outside

Fig. 1. A possible electro-magnetic gyroscope



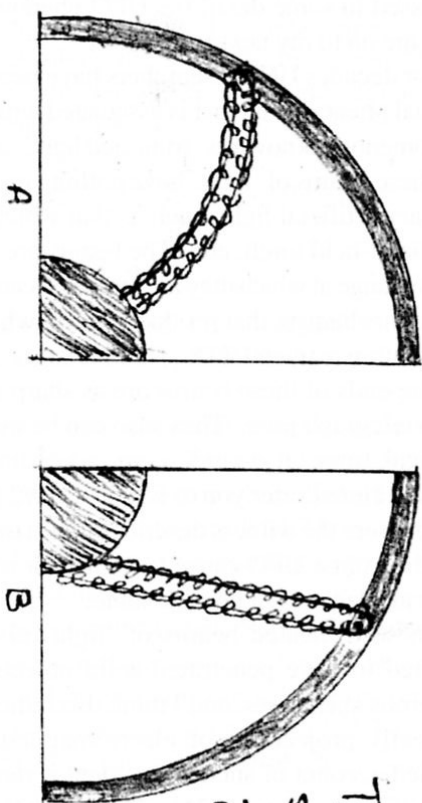
Both ends of the drive shaft would be suspended using strong magnetic forces within the housing at each end of the drive shaft. Suspending the drive shaft in magnetic fields would prevent friction.

The two attachment arms would carry all power links to cause the gyroscope to spin and to suspend the gyroscopes drive shaft in the EM fields at both ends of the shaft.

This central section would house the coiled wiring through which electrical power would flow in order to create the electro-magnetic field for driving a craft through space. This would spin rapidly, driven by the drive shaft. The spinning would create a solid disc of EM energy that would react against the EM fields of astronomical bodies.

The electrical power required to energise the central section of the gyroscope could be obtained from a built in power unit, possibly nuclear, or beamed into that section using microwave energy.

fig =



Two quarter sections showing basic options for a design of the central section of an E.M. gyroscope.

The central section of the gyroscope would of course have spikes radiating from the hub to the periphery of the gyroscope. Each spoke would in fact be double ribbed in order to create a circuit for the electrical power that would create the E.M. field of the gyroscope. The outward and inward ribs of each spoke would have to be insulated and firmly attached to the rim of the gyroscope. A curved rib design etc. might prove more effective than a design that radiates along the shortest distance from hub to rim. The number of spokes used per gyroscope would be optional subject to experimental results.

Needless to say the coils of any gyroscope used in this way would not be left loose and exposed, but embedded in a material of some kind that might in turn act as the insulation. The above drawing is simply for illustrative purposes.

influence, which was almost certainly the Earth's own magnetic field. The observation leads me to ask, could magnets therefore be used instead of gyroscopes to achieve electromagnetic drive?

The programme presented by Nick Cook also discussed in some detail the UFO phenomenon, which leads me on to my next suggestion.

For decades UFO researchers have been aware of an unusual phenomenon that is associated with UFOs. That phenomenon is known as 'truncated light', or 'solid light'.

These beams of 'light' have nothing in common with ordinary artificial light, such as that which is projected by a hand-held torch, etc. The beams are well defined, and the range at which they are projected can be controlled by the mechanism that produces them, whatever that is, from within a given UFO.

The ends of these beams are as sharp as the end of, say, a telegraph pole. They also can be made to exert a physical force, it would seem, according to witness reports. Here I refer you to FSR vol. 19/2 (March-April 1973). Here the witness describes how a truncated beam of light from a UFO caused a transistor radio to move, that was placed on a bedside table.

These truncated beams of 'light' also have been reported to have penetrated solid objects. There are numerous such cases, and I think this indicates that they are really projections of electromagnetic energy. A detailed account of such an incident is reported in FSR vol. 17/3 (May-June 1971). The incident took place in Argentina, near a town named Trancas, in October 1963.

The above two paragraphs suggest to me that these beams of 'light' could also be used as a mode for electromagnetic propulsion. But it is doubtful that, even secretly, anyone has developed this kind of technology, on Earth that is.

For further interesting reading with regards to this aspect of the UFO phenomenon, may I recommend readers to FSR vols. 22/5 (1976) and 24/2 (1978). One object is reported in the articles to have been using its beams of 'light' to support it while standing on the ground. The articles are entitled *UFO Physics 1 and 2*, by John Heering.

This brings me back to E.M. gyroscopes. As mentioned in my first article, these gyroscopes would not operate under normal conditions, since super-conduction would ideally be used. In one respect the design of the gyroscope would be complex, because of the electric motor attachments at both ends of the drive shaft. However, strictly speaking, there would be only one moving part with respect to each gyroscope.

The directional flow of power to create the E.M. field would be from hub to rim along the lower ribs of each spoke, and rim to hub along the top ribs of each spoke of the gyroscopes. This would increase the resistive effect of the E.M. fields of the gyroscopes against the E.M. fields of astronomical bodies, and therefore of course give any spacecraft greater power.

I will now let the illustrations and related explanations

speak for themselves. But I repeat the statement of the first article, with reference to the laws of physics, nobody is having any free lunch with what is being proposed.

To conclude this article it may be useful to comment on the claims that some kind of E.M. propulsion system may already exist, but is classified for security reasons, etc. Two thoughts occur to me: One is economic; the other is with regard to health, in addition to security concerns.

The global economy has hundreds of billions of dollars and pounds invested in the oil industry, and vast amounts invested in other related industries. And so a new invention of the kind discussed in this article could devastate the global economy if not handled very carefully. Indeed, loss of private pensions would be a relatively minor problem compared to the huge economic, and consequent social problems, that could engulf us all.

As indicated above, health could also be a potential problem. Life has evolved on this planet in an environment of background radiation. The Earth's E.M. field, and nuclear background radiation, are two sources. Radiation from the Sun and the cosmos is another.

Some forms of radiation are harmless. As you read this article, billions of particles called neutrinos are passing through your body all the time. Such is their lack of interaction with ordinary matter, that any given neutrino can pass through a hundred light-years of lead.

However, man-made radiation is quite a different matter. Radiation from overhead power lines and mobile phones is known to be a problem. Televisions, computers and neon lights also are problem areas of artificial radiation, with regards to health.

Now, the amount of radiation that could escape from the type of propulsion system discussed in this article would probably be hundreds of times more powerful than the items mentioned above. So, since E.M. propulsion could, in theory, be used in any form of transport, it would nevertheless be unsafe to use it in land transport systems. You simply could not allow millions of E.M. propelled vehicles to be driven around our cities, radiating those cities with powerful E.M. fields of force. And even on spacecraft, it may well be the case that crew would have to be protected from this kind of drive system.

It is something similar to this kind of propulsion system that our alien visitors may be using. That is why our crude ignition systems fail, and power supplies sometimes fail in the vicinity of a UFO. Some of our alien visitors may have learned to control this kind of radiation, hence the associated phenomenon of UFOs, 'truncated' and 'solid' light.

So, even if E.M. propulsion systems have been put to use in some capacity, however limited, these perhaps are some of the reasons why the general public does not hear about them. And they will probably remain classified for some time to come. But I still long to see an end to the giant firecrackers that take off from Cape Canaveral and elsewhere around this planet. ■

SCIENCE SNIPPETS

PUSHING AGAINST THE VACUUM.

Empty space is – empty space – isn't it? Surely, that is what we mean by empty... Not so. Quantum theory indicates that the apparently empty space of a vacuum is not empty at all; rather, it is seething with electromagnetic waves.

Jordan Maclay, chief scientist of Quantum fields, a quantum engineering company in Wisconsin, says that these waves filling the so-called vacuum could be exploited to propel a spacecraft.

It is important to stress that the mechanism he envisages would not obtain 'free energy' from the vacuum. Instead, it would provide a means of obtaining a 'reaction' for the spacecraft – something to push against - without having to eject material, as in the case of a conventional rocket, or even an ion drive.

The basis for this extraordinary proposal is what quantum physicists call the 'dynamic Casimir effect', which manifests itself whenever a metal plate is rapidly accelerated within a vacuum.

Electric charge inside a piece of metal always rearranges to cancel out any localised electric field on its surface. But for an accelerating plate that is continuously encountering the fluctuating electric fields of the vacuum, this must happen very quickly.

At large accelerations, however, the process of rearrangement of electric charge cannot keep pace, in which case the only way for the surface electric field to be reduced to zero is to dissipate energy as radiation. The result is that the rapidly accelerated plate sprays out photons.

Photons are like tiny bullets of light, and their recoil slows the plate. "This is the opposite of what you need for a spacecraft," points out Maclay. "However, it is possible to achieve a net push in one direction if the plate is vibrated."

Symmetrical oscillation, such as a sine wave, will not do, for the net effect would be zero. The two halves of the waveform cycle must be different.

Maclay calculates that a metal plate vibrated 10 billion times a second with an amplitude of 1 nanometre could accelerate a spacecraft by just 3×10 to power –20 metres per second per second.

But he additionally points out that, if a second stationary plate were held parallel to the vibrating one, forming a 'resonant cavity', this could boost the emission of photons and increase the acceleration 10 billion times.

In fact, if the plate were made of something much stronger – perhaps a single crystal - that could tolerate a vibrational amplitude of 1 millimetre, it would be possible to accelerate faster than a chemical rocket. "And I'm sure there are more ingenious ways of boosting the acceleration," says Maclay.

But there's no free lunch – energy is needed to vibrate the plate, so there is no net energy gain from the vacuum. The plate is simply pushing against the medium of the vacuum, like a swimmer pushing against water.

However, Maclay says there are still huge advantages. "A spacecraft need not carry large amounts of mass to throw out the back as exhaust," he says. In chemical rockets this can be 99 percent of the total mass.

A paper describing the proposal, by Jordan Maclay and Robert Forward, will appear in a future edition of the *American Journal of Physics*.

Source: *New Scientist*, 24th May 2003, page 20.

SEARCH FOR LIFE OUT THERE GAINS RESPECT, BIT BY BIT.

Public opinion shift and Congressional support for search for extraterrestrial life has allowed NASA to name 12 new grants for Astrobiology Institute teams, which include once disfavored SETI, Search for Extraterrestrial Intelligence program; progress of now private SETI Institute is outlined and emergence of its research diversity is emphasized; National Academy of Sciences report, entitled Life in the Universe and Assessment of US and International programs in Astrobiology, recognizes unique qualities of SETI; NASA has included SETI as part of its Astrobiology Roadmap of research goals.

Source: *New York Times*, July 8, 2003.

SETI TO TARGET MOST TANTALISING RADIO TRANSMISSIONS.

Astronomers searching for signs of extraterrestrial intelligence are about to zoom in on 150 of the more tantalising radio transmissions that have reached Earth.

SETI@home, a massively popular distributed computing project, has picked out millions of strong radio signals in data collected by the Arecibo Observatory in Puerto Rico since 1999.

Now those leading the Search for Extraterrestrial Intelligence (SETI) will have a total of 24 hours on the Arecibo radio telescope to focus on a hit-list of the signals considered most likely to be radio broadcasts from alien civilisations, starting on 18 March.

However, Dan Werthimer, chief scientist for the SETI@home project, is cautious. "I give it a one in 10,000 chance that one of our candidate signals turns out to be from ET," he says.

If they do pick up a transmission "we would be hopping around and calling telescopes in England and in Germany," Werthimer told *New Scientist*. They would need independent confirmation "to make sure it isn't a bug in the software or a graduate student playing a prank" before making an announcement.

Since SETI@home was launched in 1999, over four

million people have downloaded the screensaver onto their personal computer. When they are not using the machine, the program crunches the data it has been sent by SETI.

Each data packet is a 100 second segment of noise collected as the Arecibo radio telescope sweeps the sky. The program sifts through this to look for any signals that stand out from the background static.

SETI is notified whenever someone detects a signal that appears to have been emitted from a single point, such as a planet. Such signals last about 12 seconds and have a "bell curve" shape. The characteristic shape is due to the telescope sweeping towards and then away from the source of the signal, with the peak being when the telescope points straight at the source.

Over 350 million such signals have been spotted in the radio data. But in the 24 hours available, the astronomers will be able to revisit a maximum of 150 interesting signals.

These have been selected on the basis of strength, repetition and location. If a signal is seen more than once and it seems to be coming from a star, particularly one that is known to have a planetary system, then it is more likely to be associated with intelligent extraterrestrials.

But a simpler explanation is more probable. Satellites, interstellar dust and interference create radio noise that can sometimes mimic the bell curve signal. The likelihood of this anomaly repeating in the same patch of sky is small. But, says Werthimer, "we've analysed literally trillions of signals" and the few hundred leads identified "is pretty much what we'd expect from receiver noise".

Although the SETI project has surveyed 93 per cent of the sky, it has done so indiscriminately and examined only a narrow band of radio frequencies. Project Phoenix - another project run by the SETI institute - will take a more targeted approach. They have identified specific solar systems that might harbour life and will look for signals from these.

Source: *New Scientist*, 11th March, 2003.

SETI IS ABOUT TO GET SERIOUS.

A radical design of radio-telescope is about to transform the search for extraterrestrial intelligence (SETI) into a full-time effort a hundred times more powerful than before.

SETI astronomers are planning to link 350 small, off-the-shelf dishes into one huge radio-telescope that will scan the skies 24 hours a day.

So far, the largest number of dishes to be used together is 27, in the Very Large Array (VLA) telescope near Socorro, New Mexico. But the VLA cost hundreds of millions of dollars to build. SETI receives no government funding, so to achieve comparable results at a fraction of the cost it is setting up a huge collection of cheap, 6-metre dishes, as used for satellite TV receivers across the world.

When completed in 2005, the Allen Telescope Array (ATA) will have a total collecting area of about 10,000

square metres, half that of the VLA, but far more than has ever been available to devote to searching for alien signals. And it will have cost just \$40 million.

Astronomers will be able to steer the array to any point in the sky, and it will cover a wider frequency range than any previous SETI telescope - from 0.5 to 11 gigahertz. Because it is an array it will be able to image segments of sky 2.5 degrees wide at a time, instead of a single point.

"Even from day one, the search will be 100 times quicker than what we are doing now," says Shostak. He hopes that will enable SETI to expand beyond present searches that try to cover a few thousand stars, to searching "hundreds of thousands, maybe millions of star systems".

To an ET enthusiast that's an exciting prospect. "This is the first instrument I think has a real chance of detecting a signal within our lifetimes," Shostak says. "This instrument changes the rules of the game."

If the innovative design works, the telescope could also change how other radio astronomers scan the sky, by providing a key proof of concept for one of the proposed designs for the Square Kilometre Array. This monster will have 100 times the collecting area of the ATA, and 10 times that of the world's largest existing telescope, a 305-metre wide dish at Arecibo, Puerto Rico.

Many different ideas have been proposed for the design of the One Kilometre Array. The ATA would provide a valuable demonstration that could tip the balance in favour of the cheap and cheerful approach.

Source: *New Scientist*, 8th February, 2003, page 12.

ARE ALIENS HIDING THEIR MESSAGES?

Walter Simmons and Sandip Pakvasa of the University of Hawaii have come up with a way in which aliens could send messages to each other across space that not only disguises their locations, but also makes it impossible for a casual observer to distinguish the messages from background noise.

The signaller splits the message into two parts, so that the photons are sent in opposite directions to mirrors located far from the home planet. The mirrors redirect the signals to the intended receiver, who recombines the photons to reconstruct the message.

The key idea is that the message is encoded not by the pattern or sequence of the photons sent over time, but by their positions in space.

For example, this can be done by shining the light beams through a stencil. If the image is tiny enough, Heisenberg's uncertainty principle makes it impossible to obtain accurate information about direction of travel, as well as measuring the position of the photons to determine the message information.

Neither the intended receiver nor any eavesdropper would be able to locate the home planet of the sender. Furthermore, it would be impossible to detect the message at all without very sophisticated technology.

Source: *New Scientist*, 10th May, 2003, page 22.

READERS' LETTERS

CONDOLENCES FROM MICHEL GRANGER.

Dear Philip, I have heard by the WEB the sad news of the Gordon's death, your father. MY CONDOLENCES TO YOU AND ALL YOUR FAMILY.

Gordon phoned me the last time in the beginning of this year. He announced me without any care than he was fatally ill. It was a big shock for me. But his voice was again so clear and optimistic that I didn't believe that it was so serious.

He asked me for a copy of the last book by Jean Pierre PETIT and quickly I sent it to him as a gift. I hope than he had the time and the possibility to read it.

Gordon, for me, was a remarkable man and a ufological reference. We have corresponded together for many years and his phone calls from Britain to me were always a source of comfort and also an important source of big informations concerning the ufo problem.

Especialy, he was the first to inform me of the existence of the chupacabras. I cite this detail in my last book published in France last june and intituled: *MUTILATIONS DE BETAÏL en Amérique et ailleurs. 30 ans de mystère extraterrestre. CATTLE MUTILATIONS in America and elsewhere: 30 years of alien mystery?*

Do you want than I send you a copy?

Of course, I permit you to publish this mail if you want in the next FSR. I hope that you will continue the work of Gordon and I transmit you all my compassion in these painful moments. I am proposing in the next autumn to consecrate to Gordon one of my weekly chronicle in the local newspaper DIMANCHE Saône & Loire where I write each week for more 17 years ago.

Courage, Philip (I don't know your age - I am 60 years old and my father would be 100 years old - he was deceased 5 years ago) and please keep in touch with me, a friend of your "papa" and therefore your friend to you if you permit.

Best to you. Michel GRANGER, Freelance writer,
CHALON/SAONE, FRANCE.

CONDOLENCES FROM CHRIS ROLFE.

Dear all at FSR, I was so sorry to hear about the death of Gordon, whom I had been in contact with on and off over the past 30 years. He will be sadly missed by all who knew him, I am sure. Can you tell me, will FSR continue in its present form? Will there be anyone who can take over the reigns from Gordon? Hopefully FSR will continue, and best of luck for the future. God bless Gordon, I will miss you. Chris Rolfe. UFO Monitors East Kent. ufomek@whsmithnet.co.uk

CONDOLENCES FROM DONALD LEWIS.

Dear Phillip, Well he has flown, and is now off with his beloved Eve. Lucky guy — sometimes I wish the same with my 1st. wife. As far as I'm concerned, counting all the big wigs, or anyone whatsoever in Alien research, Gordon was it, and there won't ever be another like him. He was a courageous fighter who never gave up. My heartfelt condolences, Phillip. Donald Lewis.

CONDOLENCES FROM IGNACIO & MARÍA LUZ.

Dear Philip, Our deepest sorrow for the recent death of your father, a great character, extremely respected, admired and of course loved by these friends and other addicts to mythical FSR. "Gordito" Creighton is immortal, and the very soul of FSR, will be soon in the sparkling company of Johanna and many more readers, companions and, I am sure, good E.T.s.

Ignacio and María Luz.

CONDOLENCES FROM JUAN CARLOS OROFINO.

Estimado señor Philip: Mis condolencias por el fallecimiento de su padre. Gordon Creighton ha sido para mí y también para muchísimos lectores de FSR uno de los más originales y documentados analistas de la ufología. Sus padres conocían muy bien lo que significa el sistema que difundió Gurdjieff y creo que este tránsito hacia otra instancia o nivel de existencia, los encontrará a ambos comprobando muchas de las ideas o conceptos que con tanta brillantez compartieron y expusieron en las páginas de la revista a través de muchísimos años. Continúe con su trabajo en FSR y reciba usted mi respetuoso saludo. Juan C. Orofino

CONDOLENCES FROM YVONNE HOWE.

Dear Philip, It is with sadness that I read of your father's death this week. Please accept my condolences for yourself and family. Your father was a fine man and will be greatly missed. I hope you will be able to continue with his and your own work with FSR. Yours sincerely,
Yvonne Howe.

CONDOLENCES FROM NÚRIA RIBERA.

To Mr. Philip Creighton, My deepest sorrow for the announced death of your father, a great character extremely respected, admired and of course loved by all friends, my father Antonio Ribera between, also dead in September, 24, 2000. He is immortal like my father, and the very soul of FSR will be soon in the sparkling company of Johanna, Antonio Ribera and many more readers, companions, etc. and... I'm sure that he'll be good E.T.s Núria Ribera.

CONDOLENCES FROM FRANCK BOITTE.

Dear Philip,

It is we great emotion and sadness that I am announced the departure of your father.

He was both a man of honour and knowledge and we will miss him very much.

But I'm sure that from the other side, in the company with his beloved Eve, they will closely watch our progresses and still continue to inspire us ...

Franck Boitte. ■