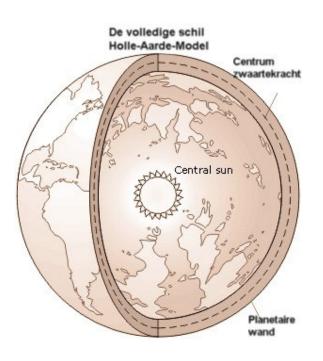
HOLLOW PLANETS



HOLLOW PLANETS, by Jan Lamprecht

PART I - HOLLOW PLANET BASICS

CHAPTER 1 – HOLLOW PLANET HISTORY -

Sir Edmund Halley (1656-1742, Halley's Comet) — Halley's most controversial theory originated from his study of magnetism. Halley realized that the magnetic poles were constantly moving. He believed this could be explained by having two fixed magnetic poles (north and south) in the crust of a hollow earth, and two more inside which were moving. He envisaged hollow spheres, one inside the other, rotating at slightly different speeds. One of these inner shells would contain the other set of magnetic poles. If that shell rotated slightly slower than the outermost shell, then that might account for the apparent motion of two of the magnetic poles while the other two stood still. Halley speculated on whether there might be life inside these shells. Since God had created "animate beings" which inhabited every part of the Earth as we know it, why should He not therefore have also caused the interior of these shells to be habited? He suggested that the atmosphere might be luminous, or the inner sides of the spheres might emit light, or there might even be small Suns inside the Earth which he referred to as: "peculiar Luminaries below, of which we have no sort of Idea." Many of the core features of the Hollow Earth theory were born out of Halley's speculations.

Could there be any logical reason for thinking that a planet might be hollow? The only possibility which comes to mind is that a spinning sphere might become hollow naturally. This was originally suggested to me by John Flora, who joined my Internet list. His argument is as follows: Scientists believe stars and planets formed from huge clouds of dust in space. Gravity caused them to condense. Then they started spinning and eventually became spheres. If this is the case then, like an ice skater, these stars and planets would have spun ever faster as they contracted. This would be dictated by the law of conservation of angular momentum. However, the solar system tells a different story. It is not the smallest planets which spin the fastest, but the largest ones. The Earth rotates om 24 hours, and many of the planets smaller than it rotate even slower. Jupiter, the largest planet, which has a diameter more than ten times that of the Earth spins about its axis in a mere 10 hours. This is not what one would expect from condensed, solid planets. John pointed out that this is also true of the different types of stars. The larger ones spin faster than the smaller ones. He believes that it can be shown mathematically that a high rate of rotation would cause a spherical body to expand until it reaches a point of maximum inertial stability. In an e-mail dated 15 Feb 1998, he explained in part, "As I said earlier, the maximum moment of inertia for a rotating sphere to spin stably is that of a hollow sphere. . ." He suggested that the planets and stars be regarded as "tornadoes in space." He explained: "This smaller size – slower rotation, bigger size – faster rotation relationship of planets and stars rotations is exactly what you would think if the planets and stars were created hollow however! Because, according to spherical shell dynamic theory, the planets and stars were created out of convection currents between warm and cool regions of space, swirling the particles into whirling, twirling tornadoes of particles. In the zero-gravity of space these tornadoes took on the shape of spheres with open poles, and the faster they were rotating, the larger they became! John's logic also suggests that Hollow Planets must have Polar Holes of some kind. He pointed out that there was a point at which centrifugal force and gravity balance. Gravity, (as we shall see later, is zero at the centre of the Earth (or any hollow sphere). All mathematical exercises show that if one could suspend an object at the centre of the Earth, then it would be weightless. So when a forming planet rotates, the matter at its corewill be flung away from the centre. Gravity however, increases as one moves away from the centre of a planet because there is more matter "below" it. So a point is reached whereupon gravity is stronger than the centrifugal force, and the expansion then stops. One thus ends up with a hollow spinning sphere.

Hollow Moon?

The idea of Hollow Planets seems to have found a home for itself among Russian scientists more than anybody else. In this century Russians have twice suggested that planetary bodies might be hollow.

The first was the suggestion that one of the moons of Mars was hollow. The second was when two senior scientists from the Soviet Academy of Sciences (as it was then known) suggested that our Moon was hollow. In the mid-1970s Vasin and Shcherbakov from the Soviet Academy of Sciences suggested that the Moon was a huge alien spaceship! No one really knows how the Moon came into being. If the Moon and Earth formed together in orbit, why are the surface materials of these two worlds so dissimilar? There are also some rocks found on the Moon which might be older than the Earth. Perhaps the Moon came from elsewhere? Perhaps even from outside our solar system. Many scientists have suggested that. But here Newtonian gravity becomes the problem. According to all calculations and models produced by scientists, the chances of a successful capture of the Moon by the Earth as a mere random event is one in billions. How could the Earth have captured the Moon against such odds? That is why these two Russian scientists suggested that the Moon was steered into orbit by intelligent beings - who perhaps are no longer around. Or perhaps they still live there inside the Moon? Why a hollow Moon then? Apollo 12 placed the first seismometer on an alien world. NASA did not expect many Moon quakes. The expected the Moon to be seismically dead. To ensure some kind of seismic results they deliberately caused part of a rocket to crash into the Moon. When they did this, the results astounded all the theoreticians. The Moon's behaviour was quite unexpected. It "rang like a bell" for almost an hour. Scientists were quite stunned at the time. It may interest the Reader to know that in 1959 a prominent Russian astronomer produced spectrographs showing what he believed was a volcanic eruption which he detected on the Moon. There is indeed more activity on the Moon than we used to think. The Moon is definitely not as geologically dead as one may think. We now know that Moon guakes occur with clock-work regularity.

CHAPTER 2 - NEWTONIAN GRAVITY REVISITED -

"Newton's Law of Gravity of one of the most useful mathematical formulae ever devised. This little formula has made space travel and the exploration of the Solar System possible. It made satellites possible. . . . Scientists use this little formula to gain an understanding of galaxies far away, and indeed the behaviour of the universe as a whole. It is now more than 300 years since Newton devised this little formula and we still do now know what causes gravity." With this introduction the author then goes into a long, detailed, technical discussion of gravity. He contrasts the theories of "attraction" and "pressure".

Euler and other scientists believed that the universe was filled with low density material called "ether" (among other things) which exert pressure on bodies of higher density, and that the attraction observed between these bodies could be caused by shielding of this pressure in the space between the bodies. Many inconsistencies with the accepted Newtonian laws are noted.

The mass of the Earth was determined by experiments by Cavendish which have been verified by others. Based on this and assuming that the Earth is a solid sphere, many scientists argue that other planets must be solid also. Dr. Tom Van Flandern, a contemporary scientist who believes in the "pressure" theory exposes contradictions between two dearly-held theories in science. Newtonian Gravity - and indeed any gravity seems to defy Einstein's theory of Relativity. Newtonian gravity is accurately measured and proven with the bounds of the solar system. However, Newtonian gravity remains untested in other areas. All we have is a formula. This formula has been used to determine the mass of the Earth. This is based on the concept that for each mass of M inside the Earth, it exerts and attractive force of F. We do not know the valid range for Newtonian gravity. Inside Newton's formula is G. G is the "universal gravitational constant". It is assumed - and assumed is the correct word here - that each mass of M exerts the same force of F regardless of where in the universe it may be placed. It is also assumed that each mass of M exerts the same force F whether it lies on the surface of the Earth or whether it be deep inside the Earth. When using the Cavendish balance to determine the mass of the Earth, it is assumed that each particle exerts a fixed force upon all others. But if Van Flandern's ideas turn out to be right, then particles near the surface of a planet might exert a force greater than those deep down. The key to all of our gravity is the mass of the Earth. If the mass of the Earth is wrong, then so are our estimates for those of other bodies. If the mass of the Earth has been overstated, then it follows that the masses of all other bodies in the solar system have also been overstated. If the Earth is hollow, then so too is every other planet in the solar system.

Other anomalies are discussed such as strange gravity noted by pendulum experiments during solar eclipses, Saturn's gravity-defying rings, gravity-defying galaxies, and "inverse square break downs".

There are four basic forces which are believed to represent all physical interaction in nature. They are:

1. Electromagnetism - 2. The Weak force of Particle Physics - 3. The Strong force of Particle Physics - and 4. Gravity.

A. H. Cook from the Cavendish Laboratory in England admits that gravitational experiments, even in laboratories, are fraught with danger: "Experiments on gravitation do indeed present the experimenter with a considerable challenge. First, the forces are very small: The gravitational force between two protons is 10 to the negative 40^{th} power of the electrical force, hence in many laboratory systems the forces are not veryh large compared with fundamental quantum fluctuations and mechanical disturbances. . . The forces of gravitation are very small.. . When the difficulties of determining the mass of a body weighing more than a few kilogrammes, and the position of its centre of mass, are considered, they effectively limit experimental studies to masses of a few kilogrammes and distances of about 0.5 m.

How can we be sure that the Earth really has the mass accorded it by Newtonian gravity? Is an experiment, using two lead balls really representative of the entire Earth? How can we be sure that gravity behaves 1,000 miles down in the Earth the same as it does 10 cm down in a lead ball? Scientists are convinced that electric currents flow inside the Earth. These currents almost certainly flow in the same direction. It therefore follows that they will be attractive. Does it not then follow that each mass of M deep inside the Earth might produce a greater force of F than previously considered? If so, then the Earth's density may be much less than it has been thought of until now. Over and above this theorising, we still have the excellent mine, borehole, ice-cap and sea bed experiments which definitely show that something is amiss. Regardless of where G was determined, the value of G increased, even at very shallow depths. All this indicates that less mass produced increased attraction. These could be the initial indications that Earth really is hollow.

CHAPTER 3 - SEISMOLOGY AND GEOLOGY-

What do we really know about the Earth's interior? And how trustworthy is our knowledge of it? Many people (mistakenly) think that the lava which pours out of volcanoes comes from a large reservoir of molten material which makes up the greater part of the Earth. Scientists have discovered that lava comes from within the Earth's crust. The lava comes from approximately 20 miles down. The existence of lava does not affect the passage of earthquake (seismic) waves. This indicates to scientists that the crust is largely solid. So where does the heat come from which melts the rock locally? Scientists have advanced two theories. Some say that the melting is due to high concentrations of radioactive elements in a particular area. These decaying radioactive elements generate enough heat to melt rock. Much lava is slightly radioactive and that lends support to this theory. Other geologists have argued that shearing and faulting are adequate heat generating mechanisms. The evidence supports both theories. Lava cannot possibly be rising from the centre of the Earth as some may be tempted to think. It would cool down and become solid on its long, slow journey upwards. Lava is therefore a surface phenomenon and does not in any way reflect what the Earth is like 50 or 100 or more miles down.

The Earth's temperature is relatively constant. Where does this heat come from? Most scientists believe it comes from decaying radioactive materials deep inside the Earth. The Earth does not seem to be cooling down any further and this should alert us to the fact that the Earth is simply not a ball of molten material which is slowly cooling down and solidifying – as many people believe.

Since the temperatures seem to rise steadily as one goes deeper and deeper, scientists have extrapolated the temperatures and attempted to estimate the temperature of the Earth hundreds of miles beneath the surface. One has to ask oneself whether this extrapolation of temperatures is really logically justified. The extremely deep mines are still nothing but a pin-prick into the surface of the Earth. The centre of the Earth lies some 3,963 miles away. A mine 6 miles deep really does not represent a valid statistical portion of the Earth. No one has discovered a way of determining the temperature deep down. Our best estimates are that lava comes from 20-30 miles down. But what will temperatures be like 100 or 1000 miles down? It's all guesswork – most of it derived indirectly from Newtonian gravity.

The only "reliable" method we have of knowing what goes on in the Earth beneath our fee comes from the science of Seismology. However, there are many examples of actual findings being different from what was predicted. The science of seismology contains two very broad assumptions which no one has ever been able to verify:

- 1. The speed of seismic waves beneath the Earth is ultimately inferred from our understanding of the structure of the Earth based on Newtonian Gravity. We have no way of being certain that these waves really are reaching these depths or travelling at these speeds.
- 2. We cannot be sure that speed changes are due to the changing constitution of the Earth. Our view of the inner Earth might be very skewed. Since most of our knowledge of the Earth is obtained from those searching for gold, minerals and oil, one can't help wondering if this skews our view of what the inner Earth may be like. We only search for these minerals in specific regions and this may be misleading us further. These holes seem to prove that much of the predicted structure changes have never turned out to be real. If we find such errors at depths of just a few kilometres, how much less can we trust our ideas when dealing with rock which is hundreds and perhaps thousands of miles beneath the surface?

The Earth is a flattened sphere. This is due to the rotation of the Earth, and the Earth being somewhat plastic. One would therefore expect the inside of the Earth to be similarly shaped. Yet there is some evidence that the Inner core may be shaped like a rugby ball. Instead of being flattened, it may be pointed at the top and bottom. The claim that the inner core is actually prolate in shape is by no means universally accepted. Even less certain than the claims of a prolate core are those for innercore heterogeneity and, even more remarkably, hexagonal symmetry. These conflicting results in recent times, and the disputes surrounding them make one wonder just how reliable seismology is at those depths.

Slow Earthquakes -

Earthquakes are caused when stresses build up and the rock then gives way catastrophically. And earthquake is an explosive event. It therefore cam as a surprise that there are some earthquakes which have unusually long source duration. The seismologists Professor Thorne Lay and Terry Wallace write: "the mechanism for the slow rupture process is unknown, but in the extreme it could produce a 'silent' earthquake devoid of short-period body and surface waves." They go on to mention that G. Beroza and T. Jordan surmise the existence of "slow earthquakes: which are virtually undetectable – and that several of these may be occurring each year. These slow earthquakes suggest to me that the Earth might not be as tightly packed in some areas as we presume. Are there enormous cavities inside the Earth, perhaps caused by erosion and other forces deep, deep down? What would happen if these cavities were to be crushed? Could the forces down there be operating a lot more slowly and weakly? Could horizontal or vertical forces be operating as well? What if "slow" events prevent us from ascertaining the stranger aspects ofdeep seismology? Even more mysteriously, could "silent" quakes be occurring which our instruments are incapable of measuring? Could events be occurring down there which are not violent enough to be detected and we therefore have an inaccurate impression of what really is happening down there?

Deep Focus Quakes -

Among the strongest evidence that the Earth is rigid all the way down to the "outer core" (where a hollow cavity exists?) comes by way of deep-focus earthquakes. Thousands of deep-focus earthquakes, making up to 22% of all earthquakes, have been recorded. Theoretically earthquakes cannot occur below 70 kilometres because the temperatures and pressures there are such that rock will flow rather than break catastrophically. The mechanism for ordinary quakes cannot therefore exist below 70 kilometres because the stresses are always relieved. Scientists hope that a suitable explanation for deep-focus quakes will be found without bending the laws of physics and chemistry, but that might not be possible. Professor Lay et al., writes: "Deep earthquakes have long posed a problem for seismologists. Laboratory experiments indicate that the pressures at a few hundred kilometers depth should prohibit brittle fracture and frictional sliding processes. Yet earthquakes as large as (magnitude) 8.2 have occurred at 650 km. The deep seismicity has many characteristics that

are similar to those of shallow earthquakes. Most important, the deep earthquakes have radiation patterns consistent with double couples, which implies shear faulting."

(Several other observations which defy accepted scientific theory are given by the author along with attempts to explain them.) The search for deep focus quake mechanisms therefore seems to be far from over. The problem may be more fundamental than scientists have appreciated so far.

Let us now consider deep focus quakes within the Hollow Earth paradigm. The key to understanding it might lie in combining some simple concepts: (a) A rigid hollow shell. (b) The different behaviour of gravity deep beneath the Earth's surface. (c) Gravity might be more variable and dynamic than science currently believes (e.g. electric currents might affect it).

If gravity varies inside the Earth, then pressure and temperature would not increase as science expects. It therefore follows that the Earth down there would be cooler and more brittle than theory currently allows for and that shear can indeed occur. It also follows that G will indeed be very different to what is currently expected at various depths. There is no reason why some of the rock might even be in a state of almost weightlessness. Density need not keep on increasing with depth. Nor would there be any reason to expect pressure to close all cavities. At these cooler temperatures we could expect water to flow and to erode deep into the Earth. This water could be one of multiple causes of deep quakes. What about dynamic gravity as a possible source of deep seismicity? What if varying electric currents inside the Earth cause gravity to increase and decrease at various times at various depths? Could this be cause of the random three dimensional distribution of after shocks which has been observed?

Hollow Planet Structure -

The solid Earth, conceptually, is made up of three parts. Imagine three spheres, one within each other. The outer sphere is the Mantle. This region is relatively solid. In it is molten material under great pressure. Within it lies the Outer Core. The Outer Core is a liquid. Within the Outer Core lies the Inner Core which is again solid. The Inner Core lies right at the centre of the Earth.

The author presents a technical analysis of seismic waves with several figures illustrating how waves are supposedly reflected within the Earth. He then presents his theory of seismic wave action in a Hollow Earth and says: In doing my own analysis and thinking about Hollow Planets, there was only one Hollow Planet model which could give the same results as the current scientific models. It seemed logical to me that if there was a hollow crust that somewhere in the middle, perhaps more towards the inner side, there would be an area of maximum density. The density of the crust would increase from the outer surface of the Earth to this point of maximum density. From there the density would decrease toward the inner surface of the Earth. This very simple model exhibits all the characteristics which we have learned from a century of global seismology. The P (primary) and S (secondary) waves which emanate from the epicentre of an earthquake descend into the Earth. Those which strike the hollow cavity's surface will be refracted back to the surface of the Earth exactly in accordance with what we saw in Figure 3.9 (from "Modern Global Seismology").

But what really interests us is the "shadow zone". (In a nutshell, one can characterize the general behaviour of seismic waves as follows:

- 1. At a distance of between 7,000 miles to 10,000 miles from the epicentre of an earthquake, one finds a "shadow zone". In this shadow zone there are very few P waves.
- 2. Beyond the 10,000 mile mark, there is a concentration of P waves and virtually no S waves. What S waves there are, are those which are thought to possibly have passed through the core. But this is open to dispute and most scientists think there are no S waves in this region.) The shadow zone is now easily explained. The shadow zone is caused by the belt of maximum density in the Earth's crust. Suppose we go down into the Earth at the epicentre. As we go deeper, the density gradually increases. It reaches a maximum at point M1. But from M1 downwards, the density decreases again until we strike the hollow cavity. Thus P waves which penetrate beyond the belt of maximum density will find themselves refracted and bent and bent downwards so that they then travel and curve along

the inside of the Hollow Planet. These waves will continue to travel like this until they again manage to penetrate and escape through the belt of maximum density. The shadow zone is thus caused by the change in density in this M-belt which naturally separates the P waves. It also explains why there are some P waves in the shadow region. All that is happening is that the waves are being bent around the Earth and being refocused on the other side.

It can be seen that the waves which are thought to be penetrating both the Outer and Inner cores may be doing nothing of the kind. These waves would simply be those which are caught by the decreasing density and bent around the hollow cavity. Note that since density decreases with depth beyond point M1, that any refraction which takes place is inwards — hugging the contours of the Inner Earth. The rest of the seismic waves bounce between the Inner and Outer surfaces as they make their progress around the Earth.

Once one is freed from Newtonian gravity, and one merely studies the seismic waves alone – not sure what path they are taking – the study of the Inner Earth becomes extremely complex and filled with all manner of unknowns. Have scientists already discovered the hollow cavity inside the Earth – in the form of the Outer liquid core? I think so. The fact that S waves don't pass through it, and that the P wave speeds are abnormally slow makes me think that this "liquid" core is really the cavity which scientists deny the existence of . After going through this exercise I find myself wondering even more if perhaps seismologists are studying a Hollow Planet without ever having realized it was so. What do you think?



PART II - THE INNER PLANETS -

CHAPTER 4 – THE COLD WINDS OF MERCURY

Mercury is the closest planet to the Sun. We know less about this world than any other planet except Pluto – which is furthest from the Sun. Mercury has only been visited by one space probe. It is an extremely hot and virtually airless world. It rotates very slowly which gives the Sun a long time to warm up various parts of Mercury while other parts become extremely cold. Mercury is similar to our Moon in many ways and is only slightly larger than it. Its surface is covered in craters – most of volcanic origin. Its mass is so low that it is thought to be theoretically impossible for this planet to retain a permanent atmosphere of anhy substance. Mercury's atmosphere is virtually nonexistent. There are no clouds on Mercury. There are no dust storms either. There are no cold winds on Mercury.

Magnetic Field Mysteries -

In this age of computers and satellites, we still do not know how the magnetic field of the Earth or any other planet is generated. The Dynamo theory has its origins in the molten core idea. One thing we do know about the Earth's magnetic field is that it originates at the centre of the Earth. It is said that convection currents in the molten core generate the magnetic field. It follows that since the Earth rotates, the molten core also rotates. If the core is generating the magnetic field, then the magnetic field's north and south magnetic ples should coincide with the Earth's north and south geographic poles. This also holds true for any other planets. If this explanation is true, then a planet can only have a magnetic field when the following conditions are satisfied:

- 1) The planet must be hot enough to have molten core.
- 2) It must rotate fast enough to generate a magnetic field. Scientists get their fair share of unexpected surprises. It was so in the case of Mercury when it turned out to have a magnetic field in spite of its slow rotation and in spite of it possibly not having a molten core.

The Earth's magnetic field is tilted 11 degrees away from its axis of rotation. Many other planetary fields are tilted anomalously. Some scientists admit there are problems with the dynamo theory: "At present. . . scientists have only one surviving theory for the origin of planetary magnetic fields. . . the dynamo theory. Akasofu notes, however, that since a planet's rotation is such an important source of energy for its dynamo, the observed large tilts of planetary magnetic fields with respect to their rotation axes pose 'a great puzzle'".

William Metz commented: "Because Mercury rotates slowly (once in 58.6 days) and emits no radio emissions that can be detected from the Earth, the early evidence for a magnetic field was surprising..." Metz was surprised that the magnetic field was off-centre by a staggering 47% of the radius of the planet, while being inclined at 10 degrees to the planet's poles.

Is Mercury's magnetic field generated by an Inner Sun which orbits approximately 700 miles away from the planet's centre? If an Inner Sun were to be a reality, we would not know exactly how it is held in place in the centre of the planet. It might even move – or sway – as the planet speeds up and slows down. On the other hand, perhaps one cannot be exactly certain of its position since Mercury possesses excess iron and perhaps this distorts the resultant magnetic field. There would have to be some kind of repulsive force which prevents such a Central Sun from crashing into the side of a Hollow Planet. Perhaps the magnetic field which such an Inner Sun generates is itself part of the mechanism which helps to hold it in its place.

Blunt Cusps -

The tips, or 'horns' of a crescent are also know as the 'cusps'. Both Mercury and Venus suffer from the "blunted cusp" phenomenon. Mercury and Venus, both being closer to the Sun than the Earth, are

the only two other planets in the solar system which go through phases similar to the Moon when viewed from Earth. Both of them on odd occasions present us with a blunted cusp. It would seem that the planet is "dented" at this point. This "dent" in the planet is causing the blunted cusp effect. What is causing such a dent? In the case of Venus, I suspect the presence of a gigantic hole in the crust which is causing the atmosphere to be sucked into the centre of the planet. This dent may have a temporary effect on the planet's cloud cover. Mercury has no detectable atmosphere which covers the planet, yet Mercury has a similar hole in its crust or perhaps dust-laden air escapes by way of a smallish hole to creat this effect?

While many have suggested that Mercury's blunted cusp is due to a dark area on the ground, there are others who have dismissed it as an optical illusion. Mercury has almost no atmosphere. How can an optical illusion occur on such a grand scale when there's no atmosphere to cause it? Why is the South Pole mainly affected? And why is the region exceptionally bright on some occasions? It is noteworthy that the phenomenon occurs at both poles, but most often at the southern pole. This suggests that we're dealing with a real phenomenon rather than a mere optical illusion.

Ice Cubes in Hell -

There may be another indication that Mercury has an atmosphere inside it. Where does the ice come from which was found at its poles? And is it as old as scientists say it is? Various scientists and writers have pointed out that the temperature at the Mercurian equator reaches a staggering 800 degrees F. This, they argue, should cause Mercury to been "baked bone dry". Mariner 10 had also found no evidence of water on Mercury in 1974. This changed due to a surprise announcement in 1991. Scientists were amazed when their very powerful Earth-based radar revealed a highly reflective patch at Mercury's North Pole. Since ice reflects very well it was thought that this was caused by ice. Calculations showed that this was possible. Thepolar temperatures on Mercury can plunge to –235 degrees F. on its polar night side. It was thus thought that some water vapour in the planet's thin atmosphere might freeze in the polar regions thereby creating ice or frost caps. The ice patch was estimated to be 640 X 300 Km in size. One UCLA planetary scientist commented: "It's like finding snowballs in hell." But the radar echoes from these patches were definitely characteristic of ice.

Many observers have noticed the existence and movement of bright spots all over Mercury's surface, including its polar regions. Could these bright areas be snow, or water-vapour bearing clouds or a combination of the above? The idea of water-vapour being in the air coming out of Mercury must seem strange. It would indicate that the temperature inside Mercury is at least above freezing point. This air could of course freeze as it exits on to the outside of the planet. This depends of course on the exact point it is exiting from. Assuming that this exit point is not exactly at the South Pole, one would expect ice to only form when this point lies in darkness, in the extreme cold of the night or when this air blows towards the night side of the planet. It would be evaporated during the next Mercurian day (in several weeks time). Only the ice in polar crater floors would be able to survive for long periods of time. The interior of a hollow Mercury would surely be exceptionally cold since it never receives direct sunlight. If air exits out of Mercury containing water vapour, then this indicates the presence of a heat source inside Mercury. No matter how hot Mercury is on the day side, it is unlikelyh that this heat could filter through the thick crust to warm the interior. Hence Mercury must have an Inner source of heat. This Inner source of heat might well be the same thing that produces its magnetic field. Does this imply that Mercury has an inner Sun?

The constant changes in the Mercurian polar regions clearly indicate that something enormous is happening there. At one moment the entire polar region disappears and cannot be viewed (blunted cusps) and at other times these regions become exceptionally bright. This seems to have been ignored by professional astronomers. Perhaps it is time someone just stood up and challenged all this theory for once and for all.

The Ring and The Spot -

Mercury sometimes passes directly between the Earth and the Sun. This is known as a transit. These transits are to be observed only in May and November. As Mercury creeps across the Sun's face, it is usually a vivid black, but on occasion a bright spot appears just south of the planet's center. A halo of bright light around the black disk is sometimes seen too. The halo may accompany the bright spot,

but not always, and vice versa. One, rarely two, small bright points of light are seen on the black disk of Mercury as it transits the Sun. Sometimes, the spot appears greyish. It is rarely centered, being mostlyh south of the center of the disk. In 1878 in the "Scientific American, there was an article with the strange title: Is There A Hole Through Mercury? It seems this bright spot had caught the attention of astronomers of that time and the idea had been suggested that there is a hole which goes right through Mercury. This hole is only visible when Mercury is in the process of transiting across the Sun. With the Sun behind it, one would then be able to see this bright spot – which would be the result of the Sun shining directly through the planet.

My own investigations into the spot are inconclusive. There are many accounts of this spot – and how it moves. My attempts at correlating the spot with a physical feature (based on the planet's period of rotation being 58.6 days) have been unsuccessful. The possibility may exist that one is not seeing the Sun, but perhaps the Inner Sun of Mercury.

The ring around Mercury also should not be appearing. It too is regarded as an optical illusion, yet it may not be. The supporting evidence I have presented here strongly suggests that Mercury does indeed have a temporary atmosphere. In that case, a ring around the planet is to be expected. The ring is merely the result of the Sun's light passing through the atmosphere.

Air Conditioning on Mercury –

Scientists often compare Mercury and the Moon and have good reason to expect them to behave similarly. Calculations had shown that if the Moon were placed at the same distance from the Sun as Mercury then its average temperature would be 350 degrees K. (77 degrees C.). This would vary by 200 degrees K. as it orbits the Sun. From 16 July 1965 to 17 October 1965 studied Mercury's temperature. To their amazement they found that even though their observations covered an almost complete revolution of Mercury, there was no significant temperature variation with phase and that Mercury was abnormally cool. When one examines the graph which shows the phase of Mercury versus the measured temperatures, then a number of anomalous incidents become apparent. At times when the illuminated portion was small, the temperatures suddenly jumped from the 200 - 300 degree K. range up to 500 degrees K. And at times when the illuminated portion was large, the temperature rose and fell strangely. For example, early in September the temperature is recorded as 150 degrees K. Later in September it jumps to 400 degrees K. Early in October it falls down to about 70 degrees K. and then within a week it rises to about 230 degrees K. The September and October incidents took place when the phase was between 0.8 and 1.0 (1.0 = fully illuminated). During this period the temperature should be rising steadily, but it did not. I wonder whether this could be caused by the presence of cold winds and ice from the interior and their disappearance later which then allows the planet to start heating up again.

It seems logical that a Mercurian inner atmosphere, being shielded from the Sjn, might be cooler than the outer surface. And if the inner atmosphere is from time to time excited by an inner Sun it might flow out on to the surface for a time. We should then find that these winds will absorb some of the enormous outer heat and help to cool down the sunlit side of Mercury. This might explain why Mercury was so much cooler than it should have been – for the period under observation. At other times, when there is no exchange of air between the inner and outer surfaces, the outer surface would heat up rapidly.

Could water-laden winds blow from inside Mercury out through some Polar Holes – the largest of which may be at its South Pole? These winds might deposit ice on the cold, dark side of Mercury, while cooling down the hot, day side of Mercury. The ice is deposited around the polar caps and even further afield. As Mercury rotates, the ice then melts. The ice which falls in craters and depressions which are not warmed by the Sun, is then later covered by dust blown by the cold winds from inside Mercury. The winds of Mercury seem to be relatively periodic and could do with more study. Perhaps the polar regions of Mercury should be constantly watched using radar. Such studies would show whether the winds of Mercury originate from inside the planet. One could not attribute the mass deposition of ice around its polar caps to ice comets. This is especially true if this deposition is cyclical and frequent. If such is the case, it can only originate from inside the planet. It would then demonstrate that not only does that planet have a substantial atmosphere inside it, but that it has water vapour. For water vapour to exist in air coming out of the inside of the planet there must

therefore be a source of heat which prevents the water from turning to ice inside the cool, dark depths of the planet. Does that planet have an Inner Sun? If that planet has some kind of atmosphere, and water vapour, and some heating mechanism inside, one can only wonder if perhaps some kind of life may exist inside that planet? The answers to all these questions may be found if we can find out more about the Cold Winds of Mercury.

CHAPTER 5 - LUMINOUS VENUS -

Venus is the second planet from the Sun. It has often been referred to as Earth's sister planet. With a diameter of 7,700 miles, Venus is very slightly smaller than the Earth. It has always been known that Venus is much hotter than the Earth.

The Missing Oceans of Venus -

The evidence suggests that Venus should have a lot of water. Some scientists believe that the photodisassociation of water molecules and the resultant escape of hydrogen into space is the reason why Venus has no more water. But is the water really gone? Or is it now below the surface? Analyses of the Venusian atmosphere led C. A Wood and D. Amsbury to suggest in 1986 that: "The discovery of a surprisingly high deuterium/hydrogen ratio in Venus immediately led to the peculation that Venus may have once had a volume of surface water comparable to that of the terrestrial oceans." They suggested that various terrain features seen in the Venera 15 and 16 radar images might be salt deposits which have remained after the Venusian oceans had evaporated.

It would appear that Venus did once have oceans of water. Venus must have been cooler in the past, perhaps before its Inner Sun got started? The planet might have condensed, cooled down and formed a solid planet. Than as things began settling down, and the inner nuclear reaction got going, the Inner Sun caused lava to flow onto the outer surface of the planet, to evaporate the oceans of water and bury the salt. The water vapour might well have ended up inside Venus once things had cooled down inside, and much of the atmosphere was sucked inside – leaving mostly carbon dioxide on the outside. Most of the heat from the Inner Sun's start-up would have reached the outer surface of the planet in the form of lava and hot gases. Of the craters mapped by Magellan, very few show any signs of aging (i.e. tectonic movements, lava-filling, etc.). The surface of Venus should be hundreds of millions of years old, yet it looks freshly minted. It seems to me as if there is some pretty strong evidence which shows that Venus did indeed once have water in oceans and rivers. But then something catastrophic happened which changed all that.

The Planetary Greenhouse -

Why is Venus so hot? At first the answer would seem simple: the planet is closer to the Sun, and the greenhouse effect of the gases in its atmosphere has caused it to retain the heat it gets from the Sun. thus causing it to become hotter and hotter. Not all scientists think that the Greenhouse effect alone can account for the high Venusian temperatures. Venus is generating far more heat than it should. Working with data from the Pioneer Venus Orbiter, F. W. Taylor "... found that Venus radiates 15 per cent more energy than it receives. To keep the surface temperature constant, Venus must be producing this extra heat from within. All the inner planets, including the Earth produce internal heat from radioactive elements in their rocks. But Taylor 's observations of Venus would mean that the planet is producing almost 10,000 times more heat than the Earth - and it is inconceivable, according to present theories of planetary formation, that Venus should have thousands of times more of the radioactive elements than the Earth does..." Venus is generating far more heat than it should. Note too, that this is estimated to be some 10,000 times more heat than the Earth. This might not necessarily require 10.000 times more radioactive elements. It might merely mean it has an Inner Sun which is more active than the one inside the Earth, and that Venus is better able to retain its heat. The source of this heat is a mystery. Clearly it is of internal origin and has nothing to do with the Sun, or the Greenhouse effect.

Annular Phase of Venus -

In order to appreciate some of the amazing things which take place on Venus, let us examine some of the characteristics of its atmosphere. The atmospheric pressure at ground level is between 92 to 95 times that of the Earth. There are also clouds at altitudes of 48 and 68 Km. These clouds have a particle densityh comparable to thick mist observed at the surface of the Earth. Scientists have long suspected that its atmosphere is highly refractive (i.e. its ability to bend light is considerable). They expect this because of its tremendous atmospheric pressure. On Earth we have a similar effect in the polar regions. The extremely cold air causes light to perform numerous tricks. But on Venus the effects are far greater. In this section we will take a look at how light from the Suin bends right around the planet in all directions. Once the Reader understands this effect, many other phenomenon on Venus will begin to make a lot more sense.

Many astronomers noted that as Venus passed in front of the Sun, that Venus would begin developing "horns" at its cusps. These "horns" were the result of the Sun's light being refracted through the polar regions of Venus. Most amazing of all were the occasions when half of Venus still had not made contact with the Sun, and yet light was seen shining from the side of Venus furthest away from the Sun. In other words, the light from the Sun had been sharply refracted. At other times a bright ring would form around Venus before contact – sometimes this would happen a day before or after contact with the Sun. The highly refractive Venusian atmosphere may be bending not only the light of our Sun. Perhaps it also bends light emanating from an Inner Sun which lies at the centre of Venus.

Ashen Light of Venus -

Sometimes a soft glow is observed on the night side of Venus. The radiated light is usually described as greyish, but it has also been described as greenish and coppery. There seems to be no pattern to the occurrence of the ashen light. There are many reports of instances of the night side of Venus being visible. For Venus to be visible all the way from the Earth, it must be emitting quite a strong light. Even at its closest approach to Earth, Venus is still more than 100 times the distance of the Moon from us.

In some ways the Ashen Light of Venus seems to be a type of auroral activity. However, unlike here on Earth it is not confined to the polar regions. Something is lighting up enormous sections of Venus – and sometimes the entire night side of the planet is lit up. Since Venus is almost the same size as the Earth, the Reader may appreciate the scale of lighting we are talking about. What form of light could light up continent sized areas – so that it can be seen from 26 million miles – up to perhaps 90 or more millions away?

Bright Spots -

Strange bright spots shine on the day side of Venus for apparently no reason. This phenomenon may be related to the bright polar caps of Venus. It might be caused by an Inner Sun's light being refracted under suitable atmospheric conditions when various clearings exist in the atmosphere. Another possible explanation may be that these spots might be intense concentrations of disassociated atoms from inside the planet. They may be the day time extension of the Ashen light, except that one only sees them when they are so intensely concentrated as to be brighter than the rest of the clouds on the day side. When all things are considered however, I tend to favour the Ashen light as the explanation for these bright spots. But some reports refer to bright spots with "scintillating, star-like" qualities which may favour some assistance from a central Sun. The famous French astronomer L. Trouvelot reports: "From Nov. 13, 1877 till Feb. 7, 1878, two remarkable white spots, strongly reminding me of those seen on Mars, have been observed on the opposite limbs, near the extremity of the cusps. The southern spot, which always appeared the brightest, became very prominent from Jan. 16, 1878, till Feb. 5, and appeared then to be composed of a multitude of bright peaks forming on its northern border a row of brilliant star-like dots of light..."

The above instance may be related to the existence of an Inner Sun. These spots are in the vicinity of the cusps (poles). He notes how the southern spot is generally the brightest. Could it be that temporary clearings in the Venusian polar regions are responsible for some of the light from a Central Sun to be causing this?

CHAPTER 6 - CUSPS, HORNS, NOTCHES & COLLARS -

Bright Polar Caps and Blunt Cusps -

Various bright and dark features appear in the polar regions of Venus from time to time. The South Pole seems to be more susceptible to these phenomena than the North Pole. These features are recorded right up to the present day and remain largely unexplained. At times the polar regions of Venus are brighter than the sunlit portion of the planet. Space probes have confirmed the extremely high temperatures on Venus and we now know that the polar hoods cannot possibly be due to ice.

The polar regions receive less light than any other portion of the planet. So what is the cause of this exceptional brightness? Scientists currently claim that aerosols high in the atmosphere of the polar regions are the cause. Why should the Venusian poles be so extremely variable in brightness? And why is this phenomenon so random?

Apart from becoming especially bright the polar regions an disappear altogether. Instead of the polar regions (cusps) ending in a sharp point as one sees on the Moon, they can become "blunted" and rounded. The tips then disappear altogether. On 28th December 1789, 31st January 1790, and 25th December 1791, J. H. Schroter noticed the blunting of the southern cusp. He also saw detached points of light beyond the blunted cusps. The southern cusp of Venus is blunt more often than the northern one. This might indicate that a southern hole is larger than a northern one.

In 1963 Dale Cruikshank wrote: "Observers of Venus often note that one or both cusps are abnormally bright compared to the remainder of the disk. (Dr.) James Bartlett contributed a very worthwhile paper on his statistical analysis of his own observations, those of Owen Ranck, and those of a group of ALPO observers lumped together. For the present time we will call these anomalous brightenings 'cusp caps', though this terms suggest a physical interpretation that is unproved..." One interesting fact that Dr. Bartlett noted is that often (35% of the time) the cusp caps appear at both poles at the same time. This suggests a common link. Why would the weather at both extremes of the planet produce aerosols at the same time? What is the connection between the two? The one connection could of course be through the centre of the planet. Could it be that a certain excitation of a central Sun could cause air to flow out of Inner Venus and to then simultaneously create bright polar caps at the same time?

The Horns of Venus -

Both Venus and Mercury go through Moon-like phases, as befits planets closer to the Sun than the Earth. Venus, however, does not present the telescope user with a uniform, mathematically precise phase. Sometimes the polar regions (cusps) of Venus "extend" into areas where the Sun's light cannot possibly be falling. These extensions of the Venusian cusps are called the "horns" of Venus. These horns are often much brighter than the rest of the crescent. The horns may project farther than the laws of optics allow (i.e. beyond 180 degrees at "Half-Moon" phase).

Collars and Depressions -

Sometimes a notch or indentation is seen just below either cusp. This notch or indentation seems to be nothing more than the polar collar. However, when it is seen in conjunction with the "horns", it can give the horns a "hooked" appearance. Patrick Moore, who disputes the existence of blunt cusps, has no problem seeing the polar collar. He notes that he can only see it when the polar caps are at their brightest. Moore has a tendency to write off many phenomena as contrast effects. The real problem may be more complicated than that. The collar might be more easily visible when the polar caps are bright, simply because the bright background helps to highlight the dull area around the polar Hole. Perhaps the bright cusps are back-lit by light from a central Sun? Perhaps this happen when the misty conditions inside the planet clear up a little and more light manages to reach the upper polar atmosphere? Perhaps the polar collar is also affected by winds blowing over the edge of the hole as well? Such winds may raise dust and one might only see this dust as it goes out over the rim of a hole.

The depression which many have seen over the past century may be related to the blunted cusps. These phenomena seem to be very rare. It may be a long time before a satellite captures a close-up

image of it. What if the depressions which astronomers saw on Venus are real? What if they really saw depressions in the Venusian clouds. Why do I think that there may be a hole underneath? Let us compare the planet to an orange. Imagine the skin of the orange to be its "atmosphere." The Earth is 7,926 miles in diameter. 99% of its atmosphere is contained in the first 30 miles of atmosphere. Now let us scale this down to an orange 70 mm in diameter. Its atmosphere would then be 0.26 mm thick. The Earth's aurora occurs at tremendous heights where there is almost no atmosphere. The Earth's aurora on such a little model would be about 0.42 mm above the surface of the orange. An orange has a rougher surface than a planet. The Reader should now appreciate ho extremely thin a planet's atmosphere is. The Venusian atmosphere is not much thicker than the Earth's. The planet's atmosphere is akin to a thin "skin" covering the rocky surface. Any depressions in that skin could never be observed from the Earth. Telespoopes do not have that sort of resolving power to see indentations so small. Nor could such depressions in the atmosphere dent or deform the planet's shape in any way whatsoever. 30, 50 or 70 miles is utterly insignificant on a planet 7,700 miles in diameter. If such massive depressions exist, then it can only be because the underlying crust is itself deformed. Baum said that if the blunted cusp effect were real, it surely indicates a tremendous drop in the height of the polar vortex. And yet, if one looks at those drawing one cannot help but doubt his reasoning. One is seeing something so enormous – something far greater than a mere 30 or 50 miles. One can only be seeing an enormous dent in the crust of the planet itself. In order to see something this enormous, and to have the effect which it does can only mean one thing; the surface of the planet has a dent in it hundreds of miles in depth. Such a dent would be the deepest crater or hole in the crust of any planet we know.

Astronomers have also seen streaks in the vicinity of the Venusian poles. "From a close study of these surprising features Baum drew certain conclusions. The observed spots, especially the straight streaks, are not superficial but permanent features as are certain polar features, notably the dark band around the southern cusp cap. (Baum, like Lowell, regards the south cusp cap as marking the actual pole); and from his study of the streak system he considered that the rotation is very slow... He further considered that the central spot from which the streaks radiated represents 'an enormous column of hot air' rising from the sub-solar point and drawing into it currents of colder air from all quarters of the disc, thus agreeing with the conclusions reached by Lowell ..."

Since the polar collar lies at the same latitude and remains in the same position, it might be the result of a physical feature. The Venusian atmosphere possibly rises and falls, and hence this polar collar may become more visible when the atmosphere falls in height. If winds blow into and out of Venus, it may be possible that dust storms add to the collar's darkening. It is hard to determine whether the collar is the rim of a hole which we are seeing directly, or whether it is caused by turbulence from air going into and out of a hole. But either way, the polar collar does lead to the suggestion that we are seeing a physical hole beneath the polar clouds.

The Maedler Phenomenon -

In 1978 Richard Baum wrote: "One of the strangest observations ever recorded of Venus was made by the renowned German astronomer Johann Heinrich Maedler with a four-inch refracting telescope on April 7, 1833.At the time Venus stood east of the Sun and was well placed for observation. In his Beitrage (1841) Maedler tells us how on that evening numerous brushes of light were seen to emanate from the illuminated limb of the planet, then a crescent, and to diverge in a sunward direction... The brushes pointed towards the fan-shaped, and invested Venus with the look of a broad multi-tailed comet..."

What could possibly account for this? ...light from inside Venus could have caused this phenomenon. Maedler saw the light pointing sunward. This is the opposite of twhat happens to a comet. A comet's tail is directed away from the Sun by the solar wind. Clearly, this explanation will not work for what Maedler saw. His phenomenon could only have been caused if an Inner Sun was quite a distance off-centre in the direction away from the Sun. Light from an Inner Sun would then shine out through both Polar Holes at an angle, pointing towards the Sun. The light would be refracted by the hot, dense atmosphere, and there would be a fan pointing towards the Sun from both Polar Holes. Why hasn't this happened again? Why doesn't this happen more often? In order for us to see this light it must be reflected off something. When the light is refracted, it might often appear to us as a large oval spot when it is not centred on a pole. We might see the oval because the light is being reflected by

atmospheric particles. We would never see the light out in space because there is nothing for it to reflect off.

CHAPTER 7 - THE SHAPE SHIFTING PLANET -

Venus goes through phases like our Moon. At a certain point in its orbit, relative to the Earth, Venus will appear as a "half-moon" shape. This is easy to predict. The problem is that Venus never matches this prediction. Venus is either a few days early or a few days late. The Moon goes through its phases like clock-work and so too should Venus. It is inconceivable that it does not.

Let us review the facts. Either light is not behaving the way it should in the vicinity of Venus, or the spherical form of Venus is undergoing change. I do not see how light could be the problem in this case, since the light we are seeing is being reflected off the top of the Venusian atmosphere. The refraction of light cannot possibly be the cause of the problem since we are not seeing light which is coming up through the atmosphere. We are merely seeing the Sun's light being reflected off the day-side of Venus. The astronomers are puzzled by the position of the terminator (line between light and dark parts of the image) of Venus. Sometimes it is too far towards the night side and at other times too far towards the day side. The terminator is therefore "waving" back and forth, to and away from the Sun – over a period of months.

The Phase Anomaly of Venus can only be caused by varying lighting conditions on Venus. Since Venus has a thick atmosphere and two possible Polar Holes, it is apparent that large scale fluctuations in the Venusian atmosphere may be a contributing factor. Now that we have identified the many factyors which are at work, the solution will fall perfectly into place. The Phase Anomaly is most apparent at dichotomy when Venus has a "half-moon" shape and the terminator should be a perfectly straight line. It is at these times obvious that it is not a straight line. Detecting the phase anomaly at other parts of the Venusian phase is much more difficult.

After all these experiments (omitted from this summary), Brinton and Moore are thus testifying to the fact that the Polar regions are much brighter than they should be. They also recognize that this brightness is considerably variable. These two astronomers are testifying to the existence of the "Horns of Venus". What they did not mention is that these Horns could not possibly be lit by the Sun since they lie beyond where the terminator should be. What if the Horns are being lit by light from inside Venus? Or by a luminous Venusian atmosphere? Let me emphasize the key issue here. Whenever astronomers speak of the Phase Anomaly of Venus, they keep emphasizing and concentrating on the Venusian terminator and the fact that it is wrongly placed. What they tend to skimp over so often is that the cusps are really the problem. The problem is not the terminator. The problem lies at the cusps. It is the abnormal lighting of the cusps which extends beyond the semicircle into the night side of Venus that is the problem. It is these cusps which are lit for a distance beyond the semi-circle. Brinton and Moore did realize this, but they did not emphasize it enough.

Let me point out another simple and yet highly relevant fact. If the Venusian dichotomy occurs late, one can then indeed point to some atmospheric phenomenon. Remember that the planet's orbit does not change. The planet is moving around the Sun exactly in accordance with expectations. The planet is in the right place at the right time. Hence the changing form of the planet is due to something on the planet itself. Now if the Venusian phase is retarded, then one might have to look for dark matter in the atmosphere which is reducing some of its reflectivity. In other words part of the planet must be lit by the Sun, but for some reason it is too dark to see. But half the time the Venusian phase is accelerated. Parts of Venus are lighting up before it is in a position to receive light from the Sun. This is of critical importance. Brasch noted that the phase was accelerated by almost two weeks at times. Now how can we see parts of Venus where the Sun's light cannot possible reach? Remember we're not seeing refracted light from behind the planet. We are seeing light emanating directly from the sun-lit portion of the planet. Clearly the planet is lit by more light than can be accounted for by the Sun alone. Where is this light coming from? As Brinton and Moore realized, the real problem is related to the unnatural lighting in the polar regions. What is lighting up the Venusian poles? Clearly, it is not just a case of bright aerosols in the upper atmosphere. No matter how reflective the aerosols are, they will still not be seen if lit by the light of the Sun alone. They must therefore either be producing their own light or light from another source must be the culprit.

The Hot Polar Caps -

When the Pioneer Venus Orbiter flew over the Venusian poles, it discovered long elongated features stretching 4,000 Km across both poles. These features are in the area where the Venusian Polar Holes should be. In 1983 Tim Schofield and Dier reported in "Nature": "The Venusian polar dipoles are long-lived, elongated, warm features seen in images of thermal emission from the polar cloud tops of the planet. They are almost 4,000 Km across, are centred close to the pole, and appear to rotate with a period of approximately 3 days retrograde." The feature is not only bright, but there seems to be a "dent" in the polar cloud structure: "Detailed comparisons of the data sets indicate that this (polar collar temperature) inversion fills and the cloud top sinks as a dipole hotspot is approached, suggesting that the dipole is a combination of temperature and cloud phenomenon." The polar cloud layer is 15 Km lower than the rest of the venusian atmosphere. Could this layer fall even more if air is being sucked into Venus?

Tim Schofield (NASA): "The polar regions of Venus ought to be cold compared with the equator. However, the dipole is warmer than the equator, and the polar atmosphere above the cloud tops is warmer than the equator up to 90 Km due to descending air." Air moving away from the equattor can surely only be cooling down as it moves ever further away from direct sun-light. How can this air possibly become warmer as it moves further away from the equator? What if Venus is hollow and a tremendous amount of heat is escaping from inside it? Could this be why the polar dipole is hotter than the equator?

Light Beneath the Clouds -

Due to the thick Cytherean atmosphere and its misty makeup, it was expected to be quite dark on the Venusian surface. In 1976 Keldysh wrote: "Another mystery in the Venera 9 pictures is the apparent shadows cast by the rocks. Avduevsky points out that as the lander descended, it took continual measurements of the illumination from all sides. It recorded the sort of diffuse light expected under a cloud cover. 'Then it landed, and all of a sudden these shadows.' If they are shadows, they would indicate a directed light source in the Venus atmosphere, possible a rift in the clouds or something more exotic." Another article in 1975 also questioned the Venera 9 photographs: "An important question is why the surprisingly sharp rocks also seem to have surprisingly sharp shadows. If the Venusian atmosphere diffuses incoming sunlight as broadly as has been expected, why are not the shadows either faint or multidirectional if not completely absent."

A further study of the night side of Venus suggests that there is some sort of light/heat coming from beneath the clouds on the night side of the planet. In 1984 two Australian scientists, D. Allen and J. Crawford reported in "Nature": "Observations of the dark side of the planet Venus at infrared wavelengths . . . have shown it to be anomalously bright in portions of this waveband." The images produced by Allen and Crawford do not show any reduction in the intensity of lighting far away from the Venusian terminator. The intensity of infrared radiation at the terminator is the same as that far away from the terminator towards the midnight sector. Could this indicate that the light is coming from another direction? From the surface of the polar regions? I say this because the six images presented in their paper always have the infrared radiation occurring in bands which lie parallel to the equator. Even when there is little infrared radiation, the "clouds" giving off this radiation stretch all the way to the midnight sector. In fact, the scientists admitted that "the nature of the cloud structure is far from certain." Could this mean that the light which produces the phenomenon comes from the North and South Poles of the planet thereby lighting up the cloud in broad bands at the same latitude?

The "Y" and "W" Markings on Venus -

According to radar measurements Venus has a 243 day axial rotation. Measurements of a great many ultraviolet photographs of the cloud tops shows them rotating about the planet in a mere 4 days! This phenomenon is known as 'super-rotation' and no one know what causes it. Why should the clouds rotate about the planet faster than the planet itself? Where does the energy for this come from? I think I can show that there is a connection between the Phase Anomaly of Venus and the super-rotation. The super-rotation was only discovered when satellites went to Venus. It turns out that the Earth's atmosphere has a far lesser degree of super-rotation as well.

Ultraviolet photographs taken in the 1960s showed the apparent movement of dark features in the Venusian atmosphere. These included the Y and W shapes which are centred on the equator. How long lived is the "Y" feature on Venus? Boyer and Guerin felt it could survive for decades, while Beebe, Scott and Reese felt it appeared at random and only lasted for 8 – 16 days. The "Y" feature is enormous, and covers almost half of Venus. What causes it? Nobody knows. I think Beebe, Scott and Reese are right, and that the "Y" appears at random and then dissipates. But why should a "Y" form consistently? The "Y" is exactly the same size each time. Venus rotates so slowly and the "Y" races across the planet's surface. It is not linked to any geographical feature. But it is produced consistently. The "W" feature is equally mysterious. It too covers half the planet.

What if the "Y" and "W" features are both caused by the "breathing" of Venus? What if this breathing of Venus is driving the tremendous super-rotation of the planet's atmosphere? I would now like to offer a suggestion as to what drives the super-rotation of the Venusian atmosphere and what causes the "Y" and "W" features. What if air is pumped out of Inner Venus and it rushes out high in the atmosphere, equatorward? The rotation of Venus would then deflect the air in the direction in which the planet is rotating. Thus when the air currents from the north meet the air currents from the south, they have both been diverted in the same direction. This combines their strength and a powerful river of air rushes along the equator in the direction of the rotation of the planet. This powerful torrent of air then gives the atmosphere a hefty shove in the direction of the rotation of Venus. Hence the atmosphere begins to flow faster than Venus rotates. It's as simple as that.

New questions come to mind. For example: Why does the "Y" cover approximately half of Venus? The "Y" covers one entire hemisphere (west to east). I think the "Y" shape is created on the night side of Venus. Meanwhile, on the day side the following is happening: Remember R. M. Baum's Radial spokes at the subsolar point? Hot air is rising at the subsolar point. Air currents are carrying away the hot air in all directions. The planetary and atmospheric rotation might deform the radial spokes so that they are especially elongated in the direction of the planet's rotation. Suddenly large masses of air come rushing out of the Polar Holes. They clash with air currents moving away from the equator. The rest of the atmosphere is super-rotating and the predominant effect is a push in the direction of the rotation of the planet. These colliding air currents then merge to form a "W" lying on its side. Thus, I think the "Y" forms on the night side of Venus and, at the same time, a "W" forms on the day side. Both these dusky marking being the result of air blowing out of Venus.

These formations are "one time" events. Air is not continually flowing out of Inner Venus (as we have noted with the telescopic observations). Strong air currents come out for short periods and then it stops. The "Y" and "W" markings are then carried around the planet by the super-rotation which they helped create. The markings then slowly dissipate or are overcome by vigorous new outflows.

Let us suppose that air is later sucked into the inner part of Venus. Would this be responsible for an effect similar to water going down the drain? Would this perhaps be why the polar dipole spins even faster than the rest of the sphere? Could this sucking in and blowing out is responsible for all the weather on this very slowly rotating planet?

When Venus Breathes -

An important theme so far has been that Venus "breathes" by way of air flowing into and out of an inner cavity. The amount of "breathing" is considerable. Enormous volumes of air probably flow into and out of this planet. Several decades ago Gerard Kuiper discovered that there were daily fluctuations in the infrared spectrum of Venus. No one knew why this was occurring. L. G. Young et al. From Caltech's Jet Propulsion Laboratory, studied the Venusian spectra nightly during the autumn of 1972. Their study was reported in the "Astrophysical Journal": "Astronomers are well enough acquainted with periodic variations in the light from the stars, but a variable planet is quite a different matter. However, the planet Venus shows regular changes in the spectrum of its atmosphere, according to four scientists at Caltech's Jet Propulsion Laboratory. The strengths of carbon dioxide lines in the Venusian atmosphere swing through a four-day cycle." Could this mean that the atmosphere inside Venus is different to the atmosphere on the outside of the planet? Could airflow into and out of the planet be causing this variable spectrum? Is the atmosphere being changed by something inside the planet? Is an Inner Sun changing the chemistry of the atmosphere in some way?

All the above taken together indicates that the entire Venusian atmosphere in a given hemisphere moves to and from the polar regions. What makes it difficult to detect is that the entire atmosphere is affected and it moves quite slowly. Some of the air is sucked into this hole which causes the entire outer atmosphere to be lowered by 1 Km. The only reason the entire Venusian atmosphere can move up and down like this is if it is being sucked into a hole and then expelled later. A rise and fall of 1 Km. In the Venusian atmosphere means that 115 million cubic miles of air is being sucked into Venus and then being expelled. This corresponds to approximately 1.1% of the total Venusian atmosphere. Since the Venusian atmosphere rotates about the planet in a mere 4 days, and the breathing also occurs in cycles of 4 days, it would seem that all of this must be driven in some way by an Inner Sun. One of the questions raised by scientists is: Where does the mechanical energy come from? The Inner Sun's activities seem to be the basis for this. Exactly how is somewhat of a mystery. There seems to be some sort of pressure balancing act going on between Inner and Outer Venus which is the cause for this strange cycle.

PART III - THE EARTH -

CHAPTER 8 - DOUBTING THE DYNAMO -

This chapter is not summarized since it is a discussion of scientific theories of the origin and workings of the Earth's magnetic field and the discrepancies and flaws associated with them. While the arguments show that the Dynamo Theory is far from being proven using the current accepted model of the Earth's make-up, no significant information is given to prove that a Hollow Earth with an Inner Sun is responsible for the magnetic field. The chapter was apparently written as background material for Chapter 9, showing that present theory is not sufficient to explain the observed phenomena and to lay a foundation for theory concerning how an Inner Sun might cause the magnetic field.

CHAPTER 9 - THE INNER SUN -

As I set out to test these old Hollow Earth theories, I wondered how one would know if there was a Sun inside the Earth. So I did a bit of reading and thinking about geophysics. Various facts led me to entertain thoughts of a nuclear fission Sun. My train of thought was originally triggered when I discovered that a few high level nuclear explosions could knock out all the electronics across the USA (in a nuclear war scenario, for example). This is because a nuclear explosion creates a powerful EMP (Electro-Magnetic Pulse) shock wave. It can knock out the sensitive electronics in computers as well as the electrical systems of almost all motor vehicles. It occurred to me that a naturally occurring nuclear reaction inside the Earth might perhaps be responsible for the Earth's magnetic field. The strange behaviour of the magnetic field seemed to confirm that it couldn't be caused by a sluggish liquid circulating about the outer core.

In the early days of space exploration H. A. Bomke detected magnetohydrodynamic waves (electromagnetic waves) in the Earth's outer atmosphere which were generated by high-altitude nuclear explosions. Masahisa Sugiura discovered similar waves which were generated by natural causes in the outer atmosphere of the Earth and transmitted along the lines of magnetic force to the Earth in the northern and souther auroral zones. There are also electric (telluric) currents which flow in the surface layer of the Earth's crust. The ground is electrically conducting and its resistivity varies markedly with depth. It has been found that these currents come from the polar regions. These currents change in sympathy with magnetic disturbances and auroras.

The next realization was that matter arranged itself according to density when the Earth formed – that's what scientists expect to happen. Denser matter at the centre of the Earth and less dense material as one moves further away from the centre and so on up through the atmosphere until one reached the edge of space. Why shouldn't heavy metals, such as uranium for example, exist in the Earth's core? Scientists say that uranium is a trace metal which does not occur naturally. They do not expect it to reside inside the Earth. It also decays. Let us assume that a solid Earth formed originally – that it was compact and tightly packed in the same way that scientists these days expect it to be. No one knows what happens to matter under those conditions. I have wondered, in my own simplistic way, whether some sort of natural enriching process is kicked off automatically when matter is that tightly packed. There might be natural processes which kick in under such conditions, processes which we don't know about yet. And we also must not forget the possibility of cold fusion either. A small amount of uranium or plutonium would be enough to start a nuclear reaction. One by one these simple facts and possibilities made me think that a naturally occurring nuclear reaction inside the Earth might be a workable proposition.

Scientists have long realized that the lava which pours from volcanoes is naturally radioactive. This is how scientists are able to date rocks – because the lava from which these rocks form is slightly radioactive. Decayed uranium turns into radium. Scientists thus theorize that radium is probably to blame. The evidence suggests that lava forms no more than 20 miles beneath the Earth's surface due to the accumulated heat from decaying radium and uranium. There are lots of volcanically active areas on the Earth. It seems as if there is quite a lot of radium in the Earth's crust. The crust is of course only a small part of the Earth. Remember that this is far away from the centre of the Earth. If there is still some radium left here near the surface after some 4 billion years of Earth history, then

surely, deep down in the Earth there was much much more when the Earth originally formed? Remember too, our volcanoes are probably driven by what is left after billions of years of radioactive decay. So how much do you suppose there was to begin with?

Uranium has a half-life of 710 million years under current conditions. That means that 710 million years ago there was twice as much uranium in the Earth's crust as there is now. It seems to me that there must have been enough uranium around originally to kick off at least one natural nuclear reaction inside the Earth.

The Earth's Heat -

Richard Milton writes: "Although it was once believed that the Earth was cooling as its molten interior lost hear, it is now known that the Earth's overall temperature is roughly constant, since heat loss from the surface is balanced by heat generated with the crust by radioactive decay." But is the Earth's temperature constant only because of the decay of radioactive materials or does the Inner Sun help in other ways to keep the climate warm?

Natural Fission Reactors -

The main evidence for the past presence of natural fission reactors comes in the form of uranium ores that are depleted in uranium-235. The main site lies at Oklo in Gabon . In June 1972 a team was working under the direction of Dr. H. V. Bouzigues at the CEA service laboratory in France . They noticed an anomaly in the abundance of the uranium-235 isotope. Some time later, much larger depletions of this isotope were discovered in uranium samples from this source. They traced this back to the Oklo deposit. This was the first positive proof of the hypothesis that a natural chain reaction was responsible for the depletion. A report in "Nature" about an international symposium held in Gabon in 1975 states: "It was pointed out that at the time of the reaction the natural abundance of the relatively fast-decaying uranium-235 isotope was more than 3%. This natural 'enrichment', helped by the moderation of the fission neutrons by the water content of the soil which enhanced their fission efficiency, and possibly by the relative absence of neutron-absorbing elements in the surroundings, allowed a nuclear chain reaction to develop..."

To summarize, our interest lies in the feasibility of there being natural nuclear reactors – even here on the surface of the Earth. Add to this the possibility of there having existed far more uranium-235 concentrations in the past. All of this taken together should clearly indicate that the idea of the Earth (and other planets) having been hollowed out by enormous nuclear reactions might not be that far fetched. Even such a small site as Oklo is estimated to have sustained a nuclear reaction which lasted anything 500,000 years to several million years. The loss of 5 tons of uranium-235 attests to the power of this reaction. What puzzled the scientists was how low grade uranium ore naturally enriched and started a fission process? Yet the evidence shows that it did indeed happen – right here on the surface. That this little nuclear reaction could produce temperatures of 400 degrees C. and run for several million years would seem to support the idea of a natural nuclear process occurring in nature right here on or in the Earth.

Inner Sun: Cold Fusion?

The subject of cold fusion doesn't seem to enjoy much credibility in the USA. Some scientists regard cold fusion as a pseudo-science. Yet many countries in the world are pouring enormous sums of money into hard scientific research on the matter. Some scientists have already discussed the possibility of cold fusion occurring inside the Earth. P. Palmer, a geophysicist has already suggested this. Helium-3 emanating from inside the Earth has been regarded by some as an indication that cold fusion might be taking place deep down inside the Earth.

Inner Earth Nuclear Processes -

When physicists installed nuclear particle detectors deep in a mine in the Kolar Gold Fields in India, they hoped to measure particle created by highly penetrating neutrinos arriving from the cosmos. They found instead immense showers of nuclear particles coming, not from above as expected, but

from the sides and even below! These huge showers of 1,000 or more different particles are called 'anomalous cascades'. Neutrinos are the only known particles capable of penetrating the entire Earth to create the upwardly directed showers, but ordinary neutrinos do not seem to have enough energy to give birth to the anomalous cascades." The Sun creates neutrinos. But most neutrinos are not expected to have enough energy to move through a solid Earth. Yet here were neutrinos passing through the Earth from all sides - and even from below. These scientists found these anomalous cascades to be too energetic to be caused by normal neutrinos. This raises two possibilities about the structure of the Earth: 1) What if the Earth's crust is thinner than scientists expect with their current solid Earth models? If the Earth is hollow, then neutrinos would be able to penetrate the Earth more easily and therefore produce the results which the scientists found. 2) Could the Inner Sun also be a producer of some of the neutrinos which are rising from the core of the Earth. Since those experiments scientists have made plans to build 'telescopes' which are pointed downwards and which detect these particles coming from below. Many European nations as well as the USA have been building such 'telescopes' which are located in the Mediterranean . The largest however will be located deep in the ice of the Antarctic continent. These neutrinos point to some kind of radioactive/nuclear process going on inside the Earth. Could it be an Inner Sun?

When The Inner Sun Shines -

Sometimes the Earth crosses directly between the Moon and the Sun. At such times the Earth cuts off the light going to the Moon. The Earth's atmosphere however refracts the Sun's light thereby ensuring that the Moon rarely disappears from view. If the Earth did not have an atmosphere, then the Moon would disappear completely. At the time of these eclipses the Earth's night side is in full view, and apart from the light streaming around the edges of the Earth, there is no other light shining on the Moon. It is at this point that a mystery surfaces. Astronomers have noted that these eclipses of the Moon are variable in brightness. Sometimes they are dark. At other times they are extremely bright. If the Earth's atmosphere is dust laden, then the eclipses of the Moon are very dark – sometimes the Moon disappears totally. But then there are times when the Moon is exceedingly bright. Far too bright. Can the aurora (which can only produce a shadow on the Earth under exceptional conditions) really light up an objec the size of the Moon 238,000 miles away? Or are there times when light from inside the Earth is refracted and bent through the cold polar air so that direct inner sunlight can fall on the surface of the Moon?

The condensed testimony of several European observers for an event on 19th March, 1848: "I wish to call your attention to the fact, which I have clearly ascertained, that during the whole of the late lunar eclipse of March 19, the shaded surface presented a luminosity quite unusual, probably about three times the intensity of the mean illumination of an eclipsed lunar disc. The light was of a deep-red colour. During the totality of the eclipse the light and dark places on the face of the Moon could be almost as well made out as in an ordinary dull moonlight night; and the deep-red colour, where the sky was clearest, was very remarkable from the contrasted whiteness of the stars. The Consul at Ghent, who did not know that there was an eclipse, wrote to me for an explanation of the deep red colour of the Moon at 9 o'clock." An observation from Ireland notes that before the eclipse ended, the light had stopped lighting up the Moon. It is as if we have a 'search-light' effect. Could it be that refracted light from the Inner Sun lit up the Moon for a short while and then left the Moon in total darkness again? Sunsets are red. This is because the red light can travel longer distances through the atmosphere whereas other wavelengths of light cannot. The deep red colour in the above observations is therefore of extreme interest. It implies that the light traveled a great distance through the atmosphere before falling on the Moon. Could this light have traveled all the way out of the Inner Earth to be refracted and to then fall upon the Moon?

There is a mysterious brightening of the Jovian moon lo sometimes when lo has been behind Jupiter – in its shadow. Scientists have picked up tha lo is sometimes anomalously bright when it comes out from behind Jupiter. Scientists have never thought of correlating this with a time when lo is above the Great Red Spot! I have wondered if some anomalous radiation from the Great Red Spot is the cause of the mysterious brightening of lo? The Earth's Moon is therefore not the only object in the solar system which undergoes such an effect. Io is the closes of the Galilean moons to Jupiter. On Saturn a bright spot appears on the ring systems. This extremely bright spot is the cause of many a Saturnian mystery. These three different phenomena may all have a very similar origin – in that light emanates from inside planets.

Direct Light on the Moon?

Could an Inner Sun really shine direct light on to the Moon? One wouldn't expect that to be the case. However, there are many factors involved in this, and it's quite a complex issue. The following ingredients affect this issue: 1) The Moon's orbit takes it approximately 27 degrees north and south of the equator. 2) The Earth is inclined by 23.5 degrees. 3) The width of a possible polar entrance. 4) The position of the Inner Sun inside the Earth at the time. Perhaps an Inner Sun wobbles around inside the Earth? 5) The temperature of the atmosphere inside the Earth. 6) The refractivity of the Earth's atmosphere in the Arctic. The most favourable conditions will therefore be when the Moon is 27 degrees north of the equator during the northern winter (when the Arctic is inclined towards the Full Moon).

Light could never fall directly on the Moon's surface if it originates from inside the Earth, travelling out via the polar regions. The main factor which might make this possible is the refractivity of the atmosphere in the arctic. Since we don not know the temperature inside the Earth, it is hard to say how the light would behave. But assuming it to be warmer than the polar regions, perhaps light could be refracted enough to fall on the Moon. Since the light from inside the Earth would be travelling a considerable distance through the inner atmosphere and then into the outer atmosphere, it is possible that considerable bending of light might just take place. I would suspect that if such an event would take place, it would probably be extremely rare. I have only found one possible example of this occurring. I feel it is important to mention the vague possibility that light from the Inner Sun might light up the Moon either at Full Moon or at New Moon – for the simple reason that perhaps someone might one day be in a position to study these possibilities. I have found one fascinating eclipse which might satisfy the criteria I have mentioned above.

Captain G. Brown was in charge of the S.S. Pacific Importer which was sailing from Cristobal to London . The following report was made by Mr. T. M. Sims, 3rd Officer, on during the night of 29-30 January 1953: "2305 to 0140 G.M.T. The commencement of the eclipse was not observed owing to almost stationary Cu(mulus) covering the Moon. During totality a small white patch of light of low brilliancy moved round the North Pole of the Moon until that phase came to an end at 0030. From that time the white patch increased in area until the end of the eclipse at 0140. During the total phase the face of the Moon appeared to be coloured in bands of blue, green, yellow and orange as in the sketch, and stars were visible with the unaided eye within 2 or 3 degrees of the Moon." What is particularly interesting about this account is that the light which is shining on the Moon appears to be refracted and split into the different components of white light. Furthermore, the light around the Moon's North Pole seems to be direct light. This event, seen by observers on 6 different ships, suggests that a cone of pure white light was shining somewhere north of the Moon's North Pole. Some of this light just barely managed to fall upon the Moon's North Pole. The remaining colours falling on the rest of the Moon suggest that this highly refracted light.

CHAPTER 10 - THE AURORA -

In the polar regions explorers, scientists and the inhabitants are often treated to phenomenal displays of light darting across the sky. This is the Aurora Borealis. The aurora is one of natures most beautiful and mysterious phenomena. Most people have been taught at school that the aurora is the result of charged particles expelled from the Sun. These particles, racing through space strike the Earth in the polar regions. Most of these particles are expelled by solar flares and various storms on the surface of the Sun. These charged particles, upon striking the Earth's atmosphere cause the aurora. Some people are aware that the Earth's aurora, and that of other planets (like Jupiter for example) appears as a ring-like structure when photographed from space.

The aurora used to mystify the early polar explorers. Sir Edmund Halley was the first to speculate that it might be caused by 'luminous material' escaping form his Hollow Earth. This was seized upon by Hollow Earthers ever since and has become an integral part of the idea. Marshall Gardner tried to demonstrate that the aurora was caused by rays of light shining out of the Hollow Earth. He thought the aurora might be due to rays from a central Sun shining out of the Earth. However, we now know so much more about its exact behaviour. Gardner 's idea, as well as Halley's ideas are definitely invalid. I was nevertheless fascinated by the possibility of a nuclear reaction within the Earth and so I spent several months familiarizing myhself with the technical detail of the aurora. I wish to call the

Reader's attention to something much more subtle - to a phenomenon known as the 'pulsating aurora'.

Charged Particles From Where?

Scientists state that the charged particles which drive the aurora all come from the Sun. But is this really so? As a general statement, I have no problem with the concept that most of the charged particles do indeed originate from the Sun. Let us say, for the sake of argument, that 90% of the charged particles which drive the aurora probably emanate from the Sun. But as will be seen later, there are some, notably those which cause the pulsating aurora, which seem to hint strongly at a terrestrial origin. Prof. Davis writes: "...these (charged) particles drift outward in the solar wind so slowly (1000 times slower than the sunlight) that the journey takes several days. Once the charged particles enter the magnetosphere, they undergo acceleration to speeds near one-fifth that of the speed of light. They then are capable of penetrating into the atmosphere to a depth of approximately 100 Km above the Earth's surface." This fact is of crucial importance. The charged particles which arrive here from the Sun have far too little energy to actually create the aurora. So how are they accelerated? Scientists don't know either.

The Aurora 's Pulse -

The Sun might well feed some charged particles to the Earth, but the Earth somehow controls the aurora. Many mysteries abound which we shall visit. The pulsating aurora is normally seen after the magnificent auroral break-up. It pulsates quietly in the night sky for hours on end. The pulsating auroral forms undergo periodic or semi-periodic variations in brightness. The periods range from 0.1 sec to more than 20 sec. Prof. Davis writes: "Pulsating aurora is spectacular, but it lacks the brightness, color and fast motions typical of the discrete aurora. In the over-all scheme of things, pulsating aurora is important because it is widespread and therefore represents the end effect of a substantial portion of the energy carried into the global auroral atmosphere by incoming fast particles. Some observations suggest that the 'on' phase of a pulse is associated with an increase in energy of the responsible incoming particles because the altitude of the lower border during the 'on' phase is lower than the altitude of nearby diffuse non-pulsating background aurora that may accompany the pulsating forms." Inherent in much of the aurora is this distinctive pulsation, this variation in its strength. Since these discrete auroras are caused by incoming streams of electrons, the implication is that something is in control of the incoming streams of electrons. What could be pumping these electrons into the polar skies – sometimes with a burst-like structure? The Reader should note that in all the examples given this flickering pulsating and flaming is taking place in the midnight sector of the Earth where the Sun has no effect at all.

Due South -

There is another pre-condition for auroras which may strike the Reader as strange and unexpected – the Sun's magnetic field must point south. Prof. Davis explains: "...the largest magnetic storms and the greatest auroral displays occur only when the solar magnetic field points nearly directly south – and also when the solar wind is moving most rapidly, and when the strength of the magnetic field at the magnetosphere boundary is at its strongest. Major auroral displays and major magnetic storms apparently never occur unless the solar magnetic field at the magnetosphere boundary is pointed primarily south." It is strange that the Sun's magnetic field must point in a north-south direction before the particles can enter the Earth's magnetic field. Could it be that the Earth's magnetic field is 'weakest' at a point in line with a possible Polar Hole in the Earth's crust? Consider this myster: The scientists are not quite sure where the charged particles are entering the magnetosphere – because it repels the charged particles – 98% of them. There has to be some weakness in the magnetosphere which allows the particles to enter. They surmise that the particles are entering from behind the Earth. But what if there is a 'hole' in the magnetosphere? A 'hole' which is a direct consequence of a hole in the crust of the planet? Could this be why the particles must be moving southward before they can then penetrate the magnetosphere and then cause the aurora?

So the charged particles have entered the magnetosphere. What then? The following sentence, penned by Davis is very telling: "What happens there is not know, but one view is that the kinetic energy carried by the particles becomes temporarily stored as magnetic energy which then releases

suddenly during substorms and causes the acceleration of auroral primaries." It is clear from the above that some uncertainty exists regarding the sequence of events once these charged particles enter the Earth's magnetic field. How are the 'stored'? How are they accelerated?

Auroral Conjugacy -

Back in 1733 the French scientist Jean Jacques d'Ortous de Mairan thought that auroras might occur in the southern hemisphere as well. He suspected that the aurora was caused by the Sun, and he therefore expected the aurora to be identical in both hemispheres. The term 'auroral conjugacy' is even more specific. It means that the aurora in one hemisphere is the mirror image of the aurora in the other hemisphere. Prof. Davis took part in a set of experiments which as far as I know have never again been repeated. They devised a computer algorithm to determine the exact conjugate point for a magnetic line of force originating from Fairbanks , Alaska . They determined this point to lie in the Pacific Ocean about 1500 Km south of Christchurch and 600 Km east of Macquarie Island . To test their ideas they conducted 18 paired flights between 1967 and 1971. They made use of long-range military versions of the Boeing 707. These aircraft were equipped with various cameras and sensitive auroral television cameras. One aircraft would take off from Anchorage , Alaska , while the other would take off from Christchurch , New Zealand . These two aircraft then flew along carefully prescribed paths which allowed them to reach the calculated geomagnetic conjugate points simultaneously. Their routes took them towards the poles and back to their launching sites.

They discovered that auroral displays in the different hemispheres were almost mirror images of each other. This was especially true at the equatorward boundaries of the aurora. They also discovered that auroras in the northern hemisphere tended to be brighter than those in the southern hemisphere. There were some instances of exact conjugates occurring, but there were also instances where the conjugacy failed altogether. It is interesting that conjugacy tended to fail at the higher latitudes. The original idea regarding conjugacy related to the idea that charged particles from the Sun were striking the Earth's polar regions simultaneously. Since the Sun is almost 100 times the diameter of the Earth, one would expect the particles from a solar flare to engulf the Earth and for the aurora to be almost identical at all times. However, as the Reader now understands, this is not the case. The particles which strike the Earth are possible coming from 'above' (the North or South Poles), and possibly from behind the Earth. The brightest aurora is on the night side of the Earth, away from the direct line of sight of the Sun. Also, the particles are travelling too slowly when they reach the Earth. Something is accelerating them. And yet, in spite of all this manipulation of these particles from the Sun, they retain some form of conjugacy. But they do more than that. Is something inside the Earth controlling the aurora's behaviour?

Prof. Davis discovered: "The use of television systems on the aircraft led to one rather startling result. The systems detected pulsating auroras that were exactly synchronous; that is, the pulsating forms varied in brightness at exactly the same times in the two hemispheres within a tiny fraction of a second." The pulsations, great and small, match each other in intensity tens of thousands of miles apart from each other. Remember too that the pulsating aurora continues for hours and hours, and that these streams of electrons increase and decrease in intensity for hours on end, across large parts of the sky. Most amazing of all, in spite of this variability, these pulsations match each other exactly at opposite ends of the Earth. And where are these variable amounts of charged particles coming from? Are they all 'stored' from the Sun?

The explanation that two ends of a magnetic bottle open up simultaneously, allowing only some electrons to s\escape, seems highly improbable to me. It calls for a system of micro-management of the geomagnetic field at both ends of the Earth simultaneously. By what means could this occur if the Earth were solid? But what if these electrons originated from inside the Earth? What if an Inner Sun produced a variable stream of electrons? And what if an Inner Sun pulsated in some way? These streams of electrons might exit the Polar Holes, follow the magnetic lines of force and cause an aurora in the opposite hemisphere. An electron stream originating from Antarctica would therefore cause an aurora in Alaska for example. These quasi-periodic, semi-random pulsations might then match in both hemispheres simply because they come from the same source. They might also match each other in intensity – more or less. Travelling at tremendous speed, they would strike the atmosphere in two hemispheres almost virtually simultaneously. Prof. Davis confirmed: "When we were able to detect corresponding pulsating auroras in the two hemispheres, they were always exactly in phase, right

down to a few milliseconds... No, we never saw any that were shifted at all. We really expected to find them bouncing out of phase just like a tennis ball going across the net and being hit back by racquets on either court, but that definitely was not the way it was.... Whatever the cause it would seem that the triggering of the pulses must occur in the equatorial plane." But there's a problem in postulating the equator as the source of the pulsating aurora. The magnetic field at the equator is approximately half as strong as in the polar regions – the magnetic field is at maximum strength in the polar regions and is controlled from there. There is no known mechanism at the equator which has any effect on the magnetic field. Remember too that the pulsating aurora occurs at night, and therefore the Sun cannot be the direct cause of these pulsations.

Let me attempt a Hollow Planet explanation of the Earth's aurora – and judge for yourself whether this scenario makes any sense. A solar flare erupts on the surface of the Sun, sending charged particles racing outwards towards the planets. Most of the particles are repelled by the Earth's atmosphere except for those occasions when the Sun's magnetic field points southwards. Only these particles can slip through a weakness or a hole in the Earth's magnetosphere. (A hole which has yet to be discovered, I might add.) These southward moving particles are then channeled by magnetic lines of force into a hole in the crust of the Earth. This happens to them because the Earth's magnetic field originates from this point. They follow the magnetic lines of force through the Inner Earth and exit at a south polar entrance. Under normal circumstances they would continue to encircle the Earth forming a doughnut-shaped belt which we call the Van Allen belt. Under normal conditions these particles possibly continue orbiting into and out of the Earth for days and weeks on end. They are constantly traveling in this circular motion. Could this be how these particles are gradually accelerated?

A stream of electrons produced by the Inner Sun might exit the Earth via its south Polar Hole and then be guided by the magnetic lines of force. These electrons would then go around the outside of the Earth and enter the Earth again. In this manner these electrons would continuously circuit the Earth without there being any indication whatsoever of their presence. There may be other streams of charged particles which move in the opposite direction by exiting via the north Polar Hole and entering through the south Polar Hole. These two opposing streams of charged particles would be encircling the Earth in opposite directions – endlessly. This might be the cause of the Van Allen belt – which surrounds the Earth.

Remember the possible connection between a south pointing solar magnetic field and auroral storms? Prof. Davis and most other scientists in Europe, America and Russia are residing in the northern hemisphere. For them it is probably true that a south pointing solar magnetic field triggers auroral storms in the northern hemisphere. What if a north pointing solar magnetic field were the cause of auroral storms in the southern hemisphere? This seems to me to be a logical conclusion to draw. Hence I'm suggesting that perhaps there are two opposing streams of charged particles circling the Earth.

Let's suppose that these streams continue circling around and through the Earth for days and weeks on end. Then a 'magnetic storm' is triggered by the Central Sun. The Central Sun may then bend the magnetic lines of force causing them to now strike the Earth's atmosphere thereby causing the aurora quite a considerable distance away from the polar entrance. As the Central Sun's activity intensifies, it perhaps bends the magnetic lines of force even more so that the auroral oval widens and the aurora moves southwards. It seems from the evidence that most of the particles do indeed originate from the Sun. However, there may be a small percentage contributed by a tiny central Sun inside the Earth.

The Dynamo Link -

The idea that most aspects of the aurora may be linked to events at the core of a Hollow Planet may well seem absurd, so let me offer some evidence. The pulsations of the pulsating aurora definitely seems to have an earthly origin and to be related to whatever 'dynamo' it is which creates the Earth's magnetic field: "Pulsating auroras are usually accompanied by geomagnetic pulsations, and very rarely by faint whistling sounds. They also appear to generate 3000Mc radio waves." Or is it that whatever generates the 3000Mc radio waves also generates the geomagnetic pulses as well as the pulsating aurora?

It turns out that the night sky pulsates of its own accord. An interesting study resulted in the discovery of atmospheric brightness pulsations lasting about one millisecond, consisting of damped oscillations at a frequency of approximately 10 Kilohertz. These flickers are hard to explain in terms of terrestrial atmospheric physics. Could it be that the flickers in the night sky and the pulsations and radiowaves of the pulsating aurora are all caused by an Inner Sun?

CHAPTER 11 – UNDERGROUND RADIO WAVES –

Long Delayed Radio Echoes -

One of the mysteries of radio is a phenomenon which has come to be know as the LDE – Long Delayed Radio Echo. Radio waves move at the speed of light. The Earth is slightly less than 8,000 miles in diameter. Thus a radio wave can move virtually instantaneously around the world (approximately $1/7^{th}$ of a second). Back in the late 1920s European scientists first discovered the existence of LDEs. These are transmissions which are echoes of earlier transmissions. Some bounce off the Moon, some 240,000 miles away. These echoes take 2.6 seconds to travel to the Moon and back. Hence scientists and radio amateurs are familiar with these two echoes – $1/7^{th}$ second and 2.6 seconds. It was thus something of a surprise when echoes occurred of 8 seconds, 11 seconds and so on. These LDEs are extremely rare. Some estimates put them as one occurring in every two million transmissions. Most LDEs have echo times of under 30 seconds, but some have been recorded with times of up to 5 minutes. They normally occur in the frequency range of 810 KHz to 144 MHz. On rare occasions there are multiple echoes from the original signal. LDEs may of course be caused by several different factors.

One possibility which no one has ever examined is whether these radio waves might be bouncing around inside the Earth! This is an idea which has occurred to me while doing my feasibility study. This idea is of course only valid if a planet actually has gigantic holes in it which would allow radio waves to bounce into and out of the planet. I was struck by the strange nature of the LDE problem. It seemed very consistent with the idea of radio waves bouncing around inside a gigantic hollow ball. The curvature of a Hollow Planet would be such that radio waves could bounce around it almost ad infinitum until they lose their strength. The fact that time delays varied so much seemed to be extremely strong evidence suggesting that these waves were bouncing around inside a hollow cavity. One does not know whether there would be an ionosphere inside the Earth too, and the exact path such waves might take. Since one is also considering the existence of some kind of nuclear central Sun inside the Earth — as an integral part of theis overall idea — it seems to me to be theoretically possible that it might produce an ionosphere inside the Earth.

Could a radio signal be 'stored' inside the Inner Earth by having it bounce around therein? This could only happen if the Earth's crust contains one or more gigantic holes in it. A signal could enter via the north or south Polar Holes. Exiting from the Polar Holes should be extremely difficult since they surely only cove a small fraction of the Earth's surface area. A signal could bounce around inside the Earth until it loses all its energy, never to emerge. But on rare occasions when the conditions are right, it might just be able to emerge again over the same area from where it was transmitted. The Hollow Earth model could also produce the multiple echoes which have been noted by some scientists. Some radio waves may move around the outside of the Earth while some go inside and later emerge. All manner of variations could result from radio waves bouncing around the outside and inside of a Hollow Planet.

CHAPTER 12 – STRANGE METEOROLOGY

In the early 1970s Edward N. Lorenz, a meteorologist from the Massachusetts Institute of Technology, engaged in an interesting study in a field now known as "Chaos theory". Lorenz posed the question: Can the flap of a butterfly's wing over Brazil spawn a tornado over Texas? The butterfly effect, as it has come to be called, has been studied mathematically and it poses major problems for weather prediction. It states that very small changes in the starting conditions of a model will result in very big changes later. Effectively, it places a limit on the number of days into the future one can predict the weather. Scientists now believe that we will never be able to predict the weather more than a few weeks into the future.

I wondered whether indeed Chaos theory is the only valid answer to the weather prediction problem. What if there's something else at work too, bedeviling meteorologists? What if there is a tunnel connecting the inner and outer Earth? And what if air were to flow into and out of the inner cavity? Would that not mess up all those finely honed calculations done on those super-computers? It is often stated by scientists that the world's weather is actually manufactured at the South Pole. What if a Polar Hole exists somewhere near the South Pole which is indeed responsible for some of this?

Super-Rotation of the Upper Atmosphere -

In 1974 in "Nature" David Hughes wrote: "Observations of small changes in the orbital inclinations of artificial satellites have shown that the Earth's upper atmosphere (at altitudes of 150 – 400 km) is rotating about 20 – 30% faster than the Earth itself. This phenomenon has become known as superrotation...." Hughes went on to state that the super-rotation of the Earth affected the average satellite's orbit by about 0.I degree during its life time. Since the effect is so small, it is difficult to monitor the short term behaviour of the super-rotating atmosphere. Remember that no one knows why the Venusian atmosphere super-rotates. Hughes theorized about some of the possible causes of super-rotation and ended up discounting them all. Hughes concludes: "It seems therefore that the cause of super-rotation still remains a mystery and that the Earth's spinning upper atmosphere is still the happy hunting ground for new theories."

The super-rotation of the Earth's atmosphere is nowhere near as great as the effect which occurs on Venus. If the Venusian super-rotation can be explained by way of a Hollow Planet with very large Polar Holes, I wonder if the same is not true for the Earth? The lesser super-rotation on the Earth suggests to me that the Polar Holes here on Earth may be smaller. The principle of the 'pumping-action' which I suggested for Venus might apply here on Earth. The faster rotation of the Earth may also result in an atmosphere which has far more energy and which overrides a large part of the effect of the super-rotation. Let me point out too that the jet stream circles the Earth's polar regions. The jet stream is a very powerful 'river' of air which also super-rotates about the Earth. Could it be that the jet stream derives some of its power from air flowing into and out of a Hollow Earth?

The Aurora and Weather -

Current auroral theory contends that the aurora is only caused by charged particles from the Sun. These particles strike the atmosphere so high up – where it is almost a vacuum – that there is no possible way that these particles can influence the weather. I wondered whether perhaps there could be a connection between a Hollow Earth, the aurora and the weather. In a solid Earth scenario, the Earth's core lies thousands of miles away, beneath billions of tons of rock. There is no direct link between the Earth's core and the outer surface. However, in a Hollow Planet scenario, one where a planet has Polar Holes, there is indeed a direct link between the 'core' (Inner Sun) and the outer atmosphere. Hence a link between the magnetic field and the weather seems to be a rather natural expectation – whereas on a solid Earth it is a virtual impossibility.

In the regions where the aurora is seen there is often a belief among the inhabitants of some link between the aurora and the weather. Generally, scientists mock this idea because it flies in the face of auroral theory. However, there does exist some evidence of a weak, yet physical link between the aurora and the weather. The aurora is generally accepted as being a high-level phenomenon which occurs in a virtual vacuum. I have mentioned the possible existence of low-level auroras and auroral sound which suggests other factors at work, like electricity for example. This electricity might be generated inside the Earth. The weather connection is even more important since one needs to somehow link the Earth's core with the lower atmosphere here on the outside of the Earth. The only way I can see this as a viable possibility is if there is a hole in the crust of a Hollow Earth which allows air to flow into and out of the planet. Perhaps a mechanism exists whereby a central Sun could flare up and cause a pressure wave which travels all the way from the inside of the planet to the outside. What if a central Sun were to bend magnetic lines of force on the outside of the Earth, thereby triggering an aurora while at the same time triggering a powerful pressure wave of air which would slowly travel to the outer atmosphere? Thus one would first see an aurora and then some time later (hours or days later), the physical pressure wave might arrive.

In 1837 W. B. Clarke wrote that aurorae are often followed by wind and rain. In 1872 W. F. Denning noted that major auroral displays were followed by a gale within 48 hours. In 1873 W. R. Birt noted that thunderstorms and aurorae seem to wax and wane together. In 1963 a paper in the "Journal of the British Astronomical Association" noted that records from the great 19th century Arctic expeditions contain many account of 'clouds' becoming aurorae after nightfall. These same aurorae then turned into 'clouds at dawn.

(Several other examples of observations and experiments linking aurora activity with weather are given which have been omitted here.) As can be seen from the above, manyh observers have noted a possible link between storms, winds and clouds – all possibly related to the aurora. All of these observations are impossible in the light of modern-day auroral theory.

Polar Bands -

It has been observed that cirrus clouds sometimes align themselves along the magnetic meridian (i.e. pointing to the north magnetic pole.) These clouds form long, sharply defined parallel streaks. A ground observer would see these parallel clouds as fanning out from a point on the northern or southern horizon. However, this is merely an illusion for these clouds form perfectly parallel bands. When they are overhead, these bands are evenly spaced. Sometimes these clouds are faintly luminous at night too. Von Humboldt called them 'polar bands'. (Once again several observations are cited.) The above examples illustrate a number of interlinked facts which have no right to be linked at least according to our science as it stands now. We find certain types of cloud emanating from north and north-west of England and Europe . Most of the data suggests that from the British Isles the point of origin lies somewhere in the vicinity of Greenland - or beyond. As seen from South Africa, the clouds seem to originate more or less from the South Pole. As seen from the Indian Ocean the suggestion is a line lying towards Alaska, or further on, somewhere in the vicinity of Greenland. From an American point of view one can conclude that these clouds do not seem to coincide with the magnetic meridian. So one has a phenomenon which coincides with the magnetic meridian most, but not all of the time. Also, there is no reasonable scientific explanation for: (a) The alignment, (b) The parallel spacing, (c) The movement to or from the magnetic/geomagnetic poles, (d) The manner in which the clouds start and stop abruptly.

Weather From Inside the Earth?

What happens when a scientist discovers a link so strange, so impossible that no one knows what to do with it? That happened to a climatologist by the name of Goesta Wollin. He discovered that freak storms in North America could be predicted with startling accuracy simply by watching the horizontal component of the Earth's magnetism. The problem with Wollin's discovery is that it is frankly impossible according to our current understanding of science. When I tried to contact Wollin, I was told that he had passed away in 1995. I did manage to find a Prof. William Ryan of Lamont-Doherty who had worked with him and who knew him well. He told me this about Wollin: "He co-authored many papers with Maurice Ewing, the founder and first director of Lamont-Doherty, so his reputation was highly respected."

Wollin's first amazingly successful freak weather prediction had taken place in January 1986. He had asked Al Travis of the Fredericksburg Magnetic Observatory to report any sudden changes in the magnetic field to him. On 22 January 1986 Travis phone him and told him that the instruments had shown a sudden jump in the horizontal component of the Earth's geomagnetic field. Wollin then told him that this meant a major snowstorm or flood would occur in 6 days. Wollin then phoned TV stations the region telling them what he expected to happen. The weathermen countered by saying that there was nothing unusual forecast. Their satellite picture and weather charts showed no indication of any impending storm. They turned down Wollin's requests to mention his prediction along with theirs. A freak storm struck between 25 – 28 January. 100 mm of rain fell in the coastal region between Boston and Washington, D.C., while 40 inches of show fell inland. Goesta Wollin's prediction had come true. The storm caused considerable damage to property and several people were killed.

Wollin's research began back in the early 1970s when he searched for a link between the Earth's magnetism and temperature. He and David Ericson began to study climatic changes which have occurred since the last ice age 11,000 years ago. (Details of research then given.) Within a few

months the three of them (includes William Ryan, a research student) could demonstrate that there was a strong long-term link between the strength of the Earth's magnetic field and the Earth's temperature. It was then that Wollin decided to try searching for short-term changes in the magnetic field. Could short-term changes also affect climate? He discovered that on 7 February 1967 and unpredicted blizzard had dropped 35 cm of snow on New York City. The magnetic record showed that after a long period of calm there had been an abrupt change of 40 gamma in the magnetic field strength two and a half days prior to the blizzard. He studied the record for February 1983. On 4 February 1983 the magnetic recorder had oscillated wildly. Then there was a dip when another freak storm broke. A similar event occurred in 1985. The sad events of October — November 1985 convinced Wollin that he really was onto something. A sudden storm had resulted in a flood which caused the deaths of 39 people. Wollin found that the magnetic trace for the 2-1/2 days leading up to this storm matched exactly that of the storm in 1967. This could not be a coincidence. Wollin wanted to try to make an accurate prediction based on his theory. It was t hen that he elicited the help of Al Travis. As I mentioned earlier, this led to the successful prediction of a freak storm 3 days later.

Although Wollin's ability to predict freak storms in North America appears to border on the fantastic, we must not lose sight of a key element here. Wollin's study of Alaskan data showed that there was a constant relationship between magnetism and air pressure. There is a problem in using his techniques on a blobal scale. It would mean that global magnetic field changes would cause freak storms everywhere simultaneously. If this were the case, then surely scientists would have noticed it by now. I would guess that Wollin's discovery is only valid for North America . Why? I find myself coming back to the possibility of a coupling between the activity of a central Sun and that of the Sun. Could it be that activity on the Sun communicates itself to a central Sun by way of the magnetic field? Could such a central Sun then flare up in sympathy by producing more heat as well as a sudden shock-wave? This shock-wave would then transmit itself from the centre of the Earth to a region nearby on the outer surface. This would explain the time delay which Wollin observed. That time was relatively fixed, thereby suggesting that a fixed distance is involved in the transmission of this shock wave. The key as Wollin observed was not the intensity of activity but its rate of change. This might indicate that freak weather storms are caused only by a sudden shock wave. A more gentle change in intensity would not produce an atmospheric shock wave. This would be consistent with the Alaskan weather data. It would mean that shock waves originatiing from the core of the Earth are capable of affecting Alaskan weather. Since it seems to affect Alaska, but not Europe or Britain, could we infer then that a Polar Hole in the Earth's crust lies near Alaska? Could it be that the water vapour in the air which caused the storms on the east coast actually originated inside an Inner Earth? It is worth noting that on 22 January 1986 there was absolutely no evidence whatsoever on the weather charts of an impending storm. Could that be because the factors which were about to cause the storm actually lay beneath the surface of the Earth at that time?

The Swelling Atmosphere -

With regard to Mercury we have discussed the possibility that an atmosphere indise a planet may flow out and back in again. With regard to Venus we have seen the various evidence for the rising and falling of the atmosphere across the planet. This 'breathing' action seems to indicate that Venus is hollow. Is there any indication that the Earth's atmosphere rises and falls by considerable amounts? Scientists attribute the demise of the 77 ton Skylab space station to 'unexpected solar activity' in the mid-1970s. A series of powerful solar flares erupted on the Sun which then caused the Earth's atmosphere to swell and Skylab's orbit began to decay much more rapidly. What would cause the atmosphere to 'swell' by many miles/ The connection between the Sun's activity and a considerable rise in the upper atmosphere was totally unexpected - otherwise NASA would have done something sooner. Solar flares are common. The link between solar flares and the rising atmosphere seems to have been badly known at the time - or the extent of it seemed unappreciated. Of course a rising and falling atmosphere is very strange on a solid world. How can the atmosphere suddenly rise? Will an influx of charged particles which heat the upper layers of the atmosphere really be enough to cause this tremendous swelling? In considering the circumstantial connection between solar flares and the magnetic field I have wondered whether a central Sun's activities could result in an outpouring of energy in sympathy with the Sun. Perhaps such outpourings cause a high pressure zone inside the planet which then causes air to pour out of the Polar Holes and for the outer atmosphere to then swell. Perhaps such events also cause the high pressure over Alaska and North America .

Chaos Theory -

Why is the Earth's weather so unpredictable? Is it because of billions of butterfly effects only? Or is there something more fundamental at fault? 'Ensemble forecasting' tells us an important fact. It demonstrates to us that on a global scale the entire atmosphere suddenly behaves in a manner which does not match up with the mathematical calculations of super-computers. It is nonsensical that highly complex and accurate mathematical calculations can work one day but not the next. Something must have changed. But what?

What if these alternating periods of global atmospheric stability and instability were related to air moving into and out of the Earth? Computer models (obviously) are not designed with a Hollow Planet in mind. What if these models are accurate only for the times when there is little or no air movement into and out of the Earth? What if it is on the occasions when air is sucked in or blown out that the finely balanced weather models are suddenly upset and it becomes impossible to calculate the weather patterns for two or three days hence? There can be absolutely no doubt that a large tunnel leading into the Earth would mess up computerized weather models. For suddenly many cubic miles of air might be sucked into the Earth changing atmospheric pressures and wind. Similarly, many cubic miles of air might be forced out at other times. The scientists also found that at times their models were incredibly accurate. On occasion they could predict the weather almost for a month in advance. If butterfly wings had the affect attributed to them, then this would have been impossible. Perhaps the atmosphere really is far more stable and predictable than scientists have realized. Perhaps, when one knows all the facts, weather prediction can leap forward in many areas.

PART IV - POLAR MYSTERIES -

CHAPTER 13 - GIGANTIC POLAR HOLES -

This chapter considers attempts by Reed and Gardner to prove the existence of large Polar Holes, particularly the controversial sledging speeds of Commander Peary in his trek to reach the North Pole.

It also analyzes many photographs of the Earth taken by satellites trying to find visual evidence of Polar Holes.

Conclusions -

My conclusion is really not surprising at all. The Reader probably came to this conclusion even before reading this chapter. But, there is one difference. I was open-minded enough to examine this strange possibility in detail before rejecting it. And that, I believe, is a better and more scientific approach than just rejecting the concept out of hand. I cannot find one ounce of credible evidence to suggest the existence of: (a) Any gigantic Polar Holes here on Earth. (b) The existence of a small Polar Hole exactly at the geographic North Pole (or even South Pole for that matter). Marshall Gardner and others said that the North Pole did not exist. According to them it was merely a mythical place in the middle of a hole centred on the geographical North Pole.

I may be gullible, but I also do want decent answers to my questions – no matter how stupid they may appear to others. As open-minded and gullible as I am, I truly think we can lay the gigantic holes idea to rest, at least as regards the Earth. A fool can ask more questions than a wise man can answer. But, I'm not just asking strange questions to try to befuddle the wise men. I have what I believe are valid reasons for asking these questions. Some good has come from all this nonsense of mine. We found ATS III images which nobody knew existed, and they were repatriated back to Goddard Space Flight centre. We also discovered the proper explanation for the mysterious feature seen in the ATS III images. We can also lay to rest all the nonsense produced by the NASA winter montages and show that NASA wasn't hiding anything from anyone – at least not on these occasions.

This exercise, along with the astronomical observations mentioned earlier should demonstrate to people that we need to be more aware of the images which come back from space. We should pay more attention to detail. Important facts may be staring us in the face. The strangest and most interesting results however will never reach us because the computers will be automatically removing data which is believed to be erroneous. This raises the serious possibility that satellite probes also have their own short-comings. Currently, satellite data is always considered to be superior to telescopic data. However, since t he satellites are designed with a built-in myopia, they only record things within the ranges expected of them. This raises the interesting possibility that certain telescopic observations might actually be more objective and closer to reality than the satellite data which is currently regarded as holy writ.

Having set ourselves free of the invalid ideas of the past regarding gigantic Polar Holes on Earth, let us now re-consider the problem of Polar Holes from other angles. Dr. Walter's testimony does not exclude the existence of small Polar Holes existing beyond the Arctic and Antarctic circles.

CHAPTER 14 - RELIGION & LEGENDS -

Let me state clearly that this chapter is by no means a comprehensive report of any kind on legends or scriptures. There is much more out there than I am going to mention here. In this book I have concentrated my efforts upon science. However, I want to show the Reader that there may be a few gems of truth hidden in folklore and religion which may assist us in our quest. The question I pose here is whether some religious scriptures and folklore could be based partly on physical fact?

(Numerous examples are given from mythology, religion, folk tales, cryptozoology, and supposedly actual accounts from all over the world of animals and people thought to live within the Earth.)

Conclusion -

I wished to show the Reader that there is a considerable amount of human testimony out there which suggests that someone else inhabits this Earth besides us. We have conditioned ourselves to believe that we are alone in the universe, but we may be in for one heck of a surprise. We might not even be alone on our own planet. A deeper question arises: Is this our planet? Science fiction writers have depicted hardy earthlings valiantly defending this planet against superior alien invaders. But what if the truth is far stranger? Could we be squatters on the outside of a strange planet which is very fruitful and which may harbour life both inside and out? What if an older civilization exists inside the Earth? Does that make them the real owners of this planet? Have they participated in the development of humanity? Did they assist our religions from before the time of Plato? Did they play a role in the development of Judaism, Christianity, Buddhism, Hinduism and other religions?

Is an advanced civilization living quietly inside our planet and watching us from right beneath our feet? Do they have space craft moving in and out of a 'hole-in-the-sea'? Have they learnt to overcome inertia? Do their vehicles accelerate at rates beyond our wildest dreams, and do they flash through this solar system at faster than light speed? I pose the question: If a civilization is advanced enough, could its air and space vehicles remain largely undetected? Why not? If the nations of the Earth can already produce stealth aircraft, then imagine what a super civilization might be capable of.

Regardless of where you live, I am sure your leaders have lied to you about many things (e.g. inflation, crime rate, sex scandals, etc.). Political leaders lie to us about the smallest of things. Do you disagree? What about electioneering lies and false promises? Politicians are not known for being profound, deep, or able to face up to great truths. Many of them are highly superficial. What if we are not the sole title deed holders of the very planet on which we reside? Would they lie about that? I think so. Politicians in democratic countries are very insecure. They are always thinking of their careers and of how they are going to get themselves re-elected. They are very sensitive to changes in public opinion, and they fear getting thrown out of office. They pretend to be in a strong position even when they are not, and will lie through their teeth if need be. This is especially true in military matters. Now what if these insecure little men have to face a potentially older and stronger civilization inside the Earth? How can they possibly pretend that we are in a position of strength when it would be obvious to all that this is not so? As if that is not unpleasant enough, consider how many of them will feel belittled if they had to admit that there was a greater power than them? As the Reader should appreciate, facing up to a stronger civilization only magnifies our own insecurity. Hiding it does not change the reality, but it does still enable our leaders to maintain an aura of superficial authority over us. For them, this may be good enough.

If a North Polar Hole exists, then Arctic nations would surely know about it. They may already have tried to make contact with a civilization inside the Earth. Perhaps they found them to be indifferent. Maybe the leaders of another civilization already know that agreements with our leaders are not worth the paper they're written on. Perhaps they ignore us out of choice. Such inter-civilization diplomatic failures would only serve to increase the determination of our leaders to keep this from us until they know more. They might not like the idea of admitting to the public that they are not only powerless against such a civilization, but also ignorant of its inner workings and unable to engage in a dialogue with it.

Does the idea of an Inner Earth civilization shock you? Perhaps you cannot believe for one second that such a civilization and its entrance could have remained hidden from us for so long. The Tibetan lamas stated that the entrance to Agharta lay in the far north across an ocean in the vicinity of the aurora. This corresponds to the Arctic where the Hollow Earth theory dictates there should be a hole. The Eskimos whet our appetite by suggesting that there is a 'hole-in-the-sea'. Could this hole in the sea be the entrance to Agharta? We have established that there are no gigantic holes here on Earth. But what if a much smaller hole lies hidden in the Arctic? Let us now begin the search for the hidden entrance to Agharta.

CHAPTER 15 - THE MYSTERIOUS ARCTIC -

From the very beginning, the Hollow Earth theory has had strong ties to the Arctic. This is where everybody expected to find a gigantic hole which leads through to the centre of the Earth. People like

Marshall Gardner, William Reed and many others have focused almost exclusively on this aspect. Everybody says the Arctic is well-traveled. There may be veritable 'highways' into and out of the Arctic, but that hardly means anything. Logistics alone dictates that access to the Arctic must be determined by the location of air fields, ports, availability of fuel, the range of aircraft and weather. Caves have been hidden for centuries in well-populated areas. Just look at the discovery of the Dead Sea Scrolls. If there is anything unusual in the Arctic and the Antarctic, then it must lie some distance from the well-traveled paths. The Arctic (and Antarctica too) is one and a half times the size of the USA. Do you realize how big an area that is? Then there is the bad weather which exists there - the clouds, the fog, the white-outs. It would take you years to criss-cross it in detail with an aircraft. Only Armies, Navies and Air Forces can muster the necessary time, money, personnel and equipment for such a task. The US, Canadian and Russian military must indeed know every nook and cranny of the Arctic because of the Cold War. In their extensive preparations for fighting World War III across the Arctic only they know what's really up there. The silence may mean there's nothing up there. But it could also mean they just do not want to tell us - on government orders - since they are controlled by politicians. If there is something there which they do not want us to know about, and if that thing is small enough, we could easily miss it. If it is not on a map, then no one is going to bother looking fror it. Look at a map of Arctic and you will see an enormous expanse of islandless ocean. I think the skeptical case is not as solid as many might think.

The Open Polar Sea -

(The history of Arctic exploration is given and reasons discussed why the far north was thought by many for a long time to be warmer than expected.) From latitude 70 degrees northwards, there is a very large discrepancy between theoretical and observed temperatures. Meteorologists explain this by saying that warm air from the equator blows to the polar regions where the relatively warm air descends. This is very probably the answer. Among the early 'explanations given as to why the North Pole might harbour an iceless sea was based on the idea that the polar regions actually receive more sunlight than lower latitudes. We now know that it's not just a case of how much sunlight the polar regions receive, but also the angle at which it strikes. The ice and snow is highly reflective and much of the heat is radiated back into space. The extra hours of sunlight do not therefore account for the higher temperatures in the Arctic . The suggestion that equatorial air is the cause of the greater Arctic warmth is much more sensible.

In pondering the issue I am not sure if one could expect warm winds from an inner Earth even if it did have some sort of tropical climate. One just wouldn't know what to expect regarding heat inside a Hollow Earth. So it is a bit much to just assume it has such a climate. But even if it did, wouldn't the air cool down as it traveled along a long tunnel to the surface of the Earth? Wouldn't such a tunnel lie in total darkness, and would that not cool down the air so much more?

The Arctic Ocean is not always frozen solid. Even explorers like Peary, who traveled when the ice was at its hardest, happened upon very large areas of open water. He believed it stretched from the northernmost point of Greenland, Cape Jessup westwards to Crocker Land . This is a considerable distance. I have found nothing which causes me to think that any of this open water is linked to a Hollow Earth.

There is another line of thinking which might help to explain the idea of the Open Polar sea. It has been suggested by a number of scientists and thinkers that perhaps the Arctic was warmer in past centuries. There seems to be some very convincing evidence that indeed the climate was much milder near Cape Farewell in Greenland where the original settlement took place. The soil in this region is now frozen solid all year round. But in those days it was not frozen. The coffins were penetrated by a thick mass of plant roots which indicates that the soil temperature was above freezing. O. Pettersson concluded that ice did not come down as far south in those days as it does now. If the climate really was milder in those times, it would help to explain Christopher Columbus's original observations and thoughts. It might help to explain why the Open Polar sea had support for so long.

When all the factors are taken into consideration, I favour the idea that the heat in the polar regions is largely equatorial in origin. Even if an Inner Earth were warm, I cannot see how it could have a great effect on Arctic temperatures. It seems to me that at best hot air from inside a Hollow Earth would only be a minor contributing factor to Arctic heat. Hollow Earthers stated that because the

temperatures in the Arctic were higher than predicted, therefore the Inner Earth must be quite warm. However, even under the most favourable assumptions, Arctic heat can be accounted for adequately by warm air from the equator, hence the original assumption is no longer valid. At this stage, I think it would be wise to conclude that there is no overwhelming evidence pointing to whether the Inner Earth is hot or cold. The Open Polar sea is of no further use to us in our quest, and we must now seek clues elsewhere.

The Ozone Holes -

Whenever I mention the idea of Polar Holes to anyone, they immediately wonder if the Ozone holes are related to a Hollow Earth. The subject of the Ozone holes is however extremely complex. It is deeply interwoven with the subject of atmospheric physics. My real interest in the Ozone holes was to see if they could be useful in determining the location of any Polar Holes which may or may not exist. The problem is that the Ozone holes cover an enormous area and are therefore of no use in pin-pointing something so small. They also move around considerably.

Along with the Ozone holes, I was also interested in the electric currents which flow high in the polar atmosphere. These electric currents move around and have been measured. I wondered if they too had a link with Polar Holes. I found the Ozone holes, the electric currents, and the Auroral Oval to be large scale phenomena. They are very mobile, and it is extremely difficult to see how they could be used to pinpoint something much smaller like Polar Holes. So I did not take these researches further.

The Mini Offset-Hole Proposal -

From the earliest days of this study I had been wondering how easily a small hole could be hidden up in the Arctic, especially if its location had no special significance. Firstly, a small hole is much easier to 'hide' and much harder to find. If it is small enough, its effects on the weather would be minimal. A small hole might exhibit no special characteristics which would make it stand out on satellite images.

What would happen to a polar explorer who is sledding across the ice in the vicinity of such a feature? If an explorer were to wander into it, would he necessarily end up going right into it? He might wander partly into this depression. If the feature is small, he will not even detect it. He may sledge into and out of it during the course of a day or two. He would only notice the change in slope if he were still heading downward iinto the hole at the time that he took a sextant reading. If he takes a sextant reading while deep inside the depression, he will immediately think he has wandered off course. He will think he is further north (or south) than he really is. He may try to correct for it by setting a more southerly (or northerly) course away from the tunnel itself. Such events as these might result in a certain amount of 'camouflage' which will keep many explorers and travelers out of the hole because they will think they've made some navigational error.

If, as Hollow Earthers maintained, there is warm(er) air and water emanating from inside a Hollow Earth, and if this air does indeed cause some (but not all) polyanas and the melting of sea ice, then we are left with an interesting possibility. We might be left with a 'hole-in-the-sea' just like that old Eskimo legend states. Such an ice-free hole could be sailed upon. Our Eskimo could indeed paddle into it in his kayak, and he could go fishing in it. But such a hole would be impassable to the polar explorers who used sledges. Either the entire hole would consist of open water, or the ice would be thinner and more dangerous than is normally the case. In either case, the warmer weather emanating from the hole itself would make it impassable. If such were the case, then no normal land-based expedition could wander into it. Its anomalous curvature would never be discovered for the simple reason that nobody could enter it accidentally. Its true nature would only be discovered by those who brought canoes along with them, or more likely, by those who traveled through the air.

Conclusion -

Hollow Earthers have long been suspicious of events in the Arctic and the Antarctic. In spite of their scrutiny however, they found virtually nothing of substance to indicate that gigantic Polar Holes exist. It seemed quite possible to me that a Polar Hole could lie anywhere in the Arctic and it could be quite small. Finding it might be very difficult indeed. The 'Mini-Offset-Polar-Hole' idea seemed quite

promising – at least in theory. It also changes the Polar Hole equation. It makes things much more difficult. Yet it alone may be the solution to a myriad of scientific anomalies which I have raised.

CHAPTER 16 - THE MISSING CONTINENT -

Despair -

I was very frustrated and terribly depressed at the thought that even though I had come this far, I still had nothing concrete to offer with regard to the physical location of a Polar Hole. I had been conducting this study for some years, writing this book, and examining the evidence without knowing what my final conclusion would be regarding Polar Holes. Everything had gone so well, except for the Arctic . I had scrutinized everything – photos, science, the whole lot. I took out atlases, bought the finest maps, and there was just nothing to be seen. Not the faintest clue. I only had two areas to look into before winding up my Arctic research. Then I would have to admit that I could find no physical evidence of Polar Holes. Hollow Earthers had often claimed that islands and even mountain ranges had been struck off Arctic maps. They tried to demonstrate that all polar navigation was unreliable – but this of course was not true. I studied this aspect closely and could find no evidence to suggest that polar navigation was highly flawed. On the contrary, it was amazingly accurate.

I began wondering if these 'missing lands' might be related to the elusive anomalous curvature I was look for. I wondered if these islands and mountains really existed inside Polar Holes. The other issue had to do with the discovery of the North Pole. Could the Cook/Peary controversy perhaps be related to the Hollow Earth? The only connection I could see were the issues regarding sledding speeds and navigation. Since these resulted in dead-ends, I could not see how there could be any further connection between these two diverse subjects. Bit by bit, as I followed up the 'missing lands' problem, radical new thoughts began falling into place. Let us now set off on the final leg of our journey in search of the Earth's elusive Polar Holes.

The Polar Continent -

Take a look at any map in any atlas. It shows the Arctic Ocean to be nothing but an ice-covered sea. The Arctic Ocean is quite shallow, but even so there are no islands in it beyond a certain latitude. There most definitely is no Polar continent in the Arctic . Yet, many explorers and geographers once believed there was something there. The Americans Marshall Gardner and William Reed collected a great deal of evidence to show that animals, birds, fish and whales originated from inside a Polar Hole. Many explorers wondered why some birds would fly north as winter was setting in, instead of going south. Hence Gardner and Reed wondered if these animals came from a warmer land further north, inside a Polar Hole. They were not alone in their thinking, however, There were geographers and explorers who thought these things could be explained in terms of a Polar continent. To some, the idea of the Open Polar sea tied in with the existence of this continent, and a few thought there might be a relatively warm continent up near the North Pole.

Peary had once thought that volcanic activity of some kind was taking place further north in the Arctic . During his North-Greenland Expedition of 1891-1892 he mentioned the following incident: "(An Eskimo) Megipsu told me of a heavy fall of black dust or soot during an east wind at Cape York about a year ago which frightened the natives seriously. In this neighbourhood the fall was lighter. I could get no further particulars, but as to the general truth of the story I have little doubt. It seems strongly to indicate the possibility of volcanic dust having reached that region, perhaps from some northern area still unexplored." There are no volcanoes to be found further north in the Arctic . Nor can continents be found in the Arctic Ocean on any modern map of the Arctic .

Sannikov Land -

The Sankt-Petersburg's Academy of Science (Russia) organized a research expedition in 1808-1810. They set off for the Novosibirsky Islands which are situated between the Laptev Sea and the East Siberian Sea. In 1811 Jakov Sannikov, a member of the expedition, claimed that he had seen a vast land to the north or north-west of Kotelny Island which is a part of Novosibirsky Islands. This vast land which he reported was named Sannikov Land in honour of him. In the years that followed the Sankt-

Petersburg's Academy of Science arranged for other expeditions to this area. E. Moll took part in these expeditions and he claimed to have seen Sannikov Land twice, once in 188 and again in 1893. Sannikov Land was marked on maps. No one had visited it yet, although it had been seen on the horizon on the three occasions mentioned above. Nansen, the polar explorer firmly believed Sannikov Island existed. He hoped to find it when he drifted across the Arctic in his ship, the "Fram". Nansen's is unquestionably one of the most brilliant, daring, and successful Arctic expeditions ever undertaken. Even so, Nansen never did find Sannikov Land. The Russians were absolutely convinced Sannikov Land was real and they later mounted new expeditions to find it. "The Big Soviet Encyclopedia" states: "In spite of an intensified search in the first half of the 20th century, the so-called Sannikov Land hasn't been found. In the opinion of some explorers, this land has been destroyed by the ocean as has happened to manyh other islands made mainly of fossil ice." So what had Sannikov and Moll then seen? Had they really only seen an ice-island? It had been seen on three occasions in a period of 82 years.

Sannikov Land therefore remains something of a mystery because it was seen on at least three occasions and was marked on maps. Sannikov Land might, or might not be, related to a larger mystery. There is, however, one possibility which I would venture to propose. What if the Russian expeditions earlier this century did indeed find something but kept it under wraps? Although this is mere speculation, it is a possibility which cannot be excluded. My thoughts regarding Sannikov Land therefore remain inconclusive.

Crocker Land -

The most famous 'disappearing land' of all is Crocker Land , originally seen by Peary in 1906. He saw it twice through binoculars and then proceeded to mark it on his maps. In 1914 Captain (later Admiral) MacMillan, Peary's great friend and admirer, set out to find Crocker Land . History records the fact that MacMillan's expedition never did find Crocker Land . In fact, MacMillan concluded that Crocker Land was a mirage. Scientists and polar experts these days agree with MacMillan's assessment and Crocker Land has long been struck from our maps. If everyone is in agreement, then what is the mystery?

What exactly did Peary see? When? And where? I June 1906 Peary was surveying the northern coastline of Canada. On 24 June he decided to climb a 2,000 ft mountain which was situated inland, behind Cape Colgate. In his book "Nearest the Pole" he described what he saw as he looked out over the Arctic Ocean: "North stretched the well-known ragged surface of the polar pack, and northwest it was a thrill that my glasses revealed the faint white summits of a distant land which my Eskimos claimed to have seen as we came along from the last camp." A few days later, on 28 June, Peary was at Cape Thomas Hubbard at the norther tip of Axel Heiberg Island. Peary was unable to sleep that evening, so he hitched his dogs to a sledge and drove it 1,600 ft up a hill. "The clear day greatly favored my work in taking a round of angles, and with the glasses I could make out apparently a little more distinctly, the snow-clad summits of the distant land in the north-west, above the ice horizon."

Let us carefully examine the information contained in Peary's original statements:

- 1. He saw Crocker Land through his field glasses.
- He stood on high ground at the time of the sightings.
- 3. Crocker Land stood out above ice horizon.
- 4. He personally saw Crocker Land twice.
- 5. The first time he describes seeing 'white summits'.
- 6. The second time he describes seeing 'snow-clad summits'.
- 7. The sightings were four days apart.

- 8. Crocker Land was slightly clearer on the second sighting.
- 9. He saw Crocker Land in the same direction from two different vantage points.
- 10. Peary also informs us that his Eskimos claimed to have seen the white summits of Crocker land some time on or before the 24th as they came from their last camp.

Since Peary's sighting of Crocker Land has generally been dismissed as a mirage, I did not think much of Crocker Land until Dr. Gohnert and I stumbled upon a "Times of London" newspaper article printed on 20 July 1908. It concerned Peary's upcoming attempt at reaching the North Pole and his thoughts on the matter. Peary made a remark which shows that he definitely believed Crocker Land to be a real land mass. It was this article which first brought Crocker Land to my attention and made me realize that Peary thought it was absolutely real. Peary had reckoned distances from Crocker Land, and he even intended sending a party of his own men there on his return journey from the North Pole. Crocker Land was marked on many maps during this time because everyone, including Peary, seemed to be utterly convinced of its existence.

Let us now take a look at Captain MacMillan's 1914 expedition to find Crocker Land . MacMillan describes this expedition in his book "Four Years in the White North". MacMillan desperately wanted to go back to the Arctic . There was only one place left to go, the Unexplored region which Peary referred to in his 1908 press release. MacMillan tells us he did not go searching for Crocker Land based on Peary's testimony alone: "My decision to return into the frozen North was not actuated by this single report. Richardson, McClure, Marcus Baker, Capt. John Keenan, and Dr. R. A. Harris have all given reasons for the existence of such a land. This belief has persisted for nearly ninety years. The accumulated evidence of years substantiated Peary's belief."

It is often stated that MacMillan never found anything as he ventured out on to the Arctic Ocean . However, that is not the full story. As they struggled across the pressure ridges, they kept a constant watch for Crocker Land . Nothing. Still they continued forth in their north-westerly quest. They had now journeyed seventy-eight miles out onto the Polar sea while bypassing many leads. Then, when they were approximately 100 miles from the shore, something very extraordinary happened, the likes of which has never been recorded in the history of exploration: "April 21st was a beautiful day; all mist was gone and the clear blue of the sky extended down to the very horizon. Green was no sooner out of the igloo than he came running back, calling in through the door, 'We have it!' Following Green, we ran to the top of the highest mound. There could be no doubt about it. Great heavens! What a land! Hills, valleys, snow-capped peaks extending through at least one hundred and twenty degrees of the horizon. I turned to Pee-a-wah-to anxiously and asked him toward which point we had better lay our course. After critically examining the supposed landfall for a few minutes, he astounded me by replying that he thought it was poo-jok (mist). E-took-a-shoo offered no encouragement, saying, 'Perhaps it is.' Green was still convinced that it must be land. At any rate, it was worth watching. As we proceeded, the landscape gradually changed its appearance and varied in extent with the swinging around of the Sun; finally at night it disappeared altogether. As we drank our hot tea and gnawed the pemmican, we did a good deal of thinking. Could Peary with all his experience have been mistaken? Was this mirage which had deceived us the very thing which had deceived him eight years before? If he did see Crocker Land, then it was considerably more than 120 miles away, for we were now at least 100 miles from shore, with nothing in sight. . . . To increase our latitude we set a more northerly course on the 23d and 24^{th} , with a variation of 178 degrees westerly. Observations on these two days put us ahead of our dead-reckoning in latitude 82 degrees 30 minutes, longitude 108 degrees 22 minutes, 150 miles due north-west from Cape Thomas Hubbard. We had not only reached the brown spot on the map, but we were thirty miles in-land! You can imagine how earnestly we scanned every foot of that horizon - not a thing in sight, not even our almost constant travelling companion, the mirage. We were convinced that we were in pursuit of a will-o'-the-wisp, ever receding, ever changing, ever beckoning."

Lt. Col. Molett's explanation for Crocker Land was that clouds and snow are easy to confuse. He alluded to a horizon which was whitish. In this close-up encounter with Crocker Land, MacMillan tells us that the sky was blue all the way down to the horizon. Crocker Land therefore stood out against his blue background. The mystery continued to deepen after MacMillan and his men turned back for they continued to see this mysterious, yet unattainable land. They struggled to find their trail through a

blinding snow storm. April 26th was a fine day, but MacMillan makes no mention of Crocker Land on that day. They reached igloos 7, 6, and 5 on that day's long march. Then, six days after the sighting quoted above, he wrote: "On the 27th we marched from igloo No. 5 to No. 4 in the same perfect weather and perfect going, all leads being frozen. Throughout the day the mirage of sea ice, resembling in every particular an immense land, continued to mock us. It seemed so near and so easily attainable if we would only turn back." MacMillan believed Crocker Land to be a mirage of seaice. We will study the scientific aspects of his sightings in greater detail later. But first we need to understand the facts he presents. Crocker Land seems to have a peculiar aspect to it. It always seems to be close at hand, yet by now MacMillan knows better! They seem to see Crocker Land during extremely clear weather, when conditions are 'perfect'. This makes Crocker Land difficult to explain as some kind of optical illusion. They see it on the clearest days – seemingly for hours at a stretch. Note his terse description of it as "resembling in every particular an immense land…"

MacMillan's final sighting of Crocker Land took place from Cape Thomas Hubbard, and it is evry bit as spectacular as the previous sightings: "We now turned eagerly to an examination of the Polar Sea . Peary stood here in June, 1906, and from this very spot he saw what resembled land lying to the north-west, 120 miles distant. The day was exceptionally clear, not a cloud or trace of mist; if land could be seen, now was our time. Yes, there it was! It could even be seen without a glass, extending from south-west true (sic) to north-north-east. Our powerful glasses, however, brought out more clearly the dark background in contrast with the white, the whole resembling hills, valleys, and snowcapped peaks to such a degree that, had we not been out on the frozen sea for 150 miles, we would have staked our lives upon its reality. Our judgement then, as now, is that this was a mirage or loom of the sea ice. That there is land west of Axel Heiberg Land - not north-west, as some scientists would have us believe - I have no doubt. I would limit the eastern edge of this land to 120 degrees west longitude, and the northern to 82 degrees north latitude for the following reasons: Our eight days' travel out from Cape Thomas Hubbard was over ice which had not been subjected to great pressure, evidence that it was protected by some great body of land to the west against the tremendous fields of ice driven on by the Arctic current, which has its inception north of Behring Strait and Wrangel Land, across the Pole, and down the eastern shore of Greenland. At our farthest north, 82 degrees, all was suddenly changed. The long, level fields ended in a sharp line going east and west; beyond this line there was the roughest kind of ice, which had evidently been pushed around the northern point of this unknown land over shoal ground extending toward the north." In the above, MacMillan affirms, for the last time, that Crocker Land resembles real land in every ounce of detail. He speaks of the contrast between light and dark. He mentions, again, 'show-capped peaks' - with its implications for colour and contrast. MacMillan's sighting from Cape Thomas Hubbard is even more amazing than Peary's. Peary only saw the land faintly above the horizon with his field glasses. But MacMillan sees it with the naked eye. Most astounding of all is his description that on this occasion it covers an even wider field of view than happened during his sighting out on the Polar sea. This time it stretches from the southwest through north to north-north-east. It is as if all of MacMillan's sightings of Crocker Land are much 'closer' and even more real looking than those of Peary in 1908. It is true they saw a mirage, but it was an incredible mirage the likes of which has never been reported before or since.

What we have here is excellent testimony that for long periods of time a mystery land becomes visible in the Arctic . But what could cause this? Mirages in the polar regions are distortions of something physical on the ground. This is an important fact. Mirages on a hot day result from light in the sky being refracted so that the 'water' we see on the ground in fact comes from clouds in the sky. Mirages in the polar regions are the opposite. Here we normally see mirages in the sky which are caused by objects which lie on the ground. Polar mirages are therefore a reflection or distortion of something physical. Yes, Crocker Land is a mirage, But a mirage of what? We are not dealing with magic and witchcraft. We are dealing with science, and Crocker Land remains unexplained in scientific terms, especially when we take into account MacMillan's multiple sightings.

Why should the same land be seen continually in only this one direction? This consistency suggests that this mirage is indeed related to something physical. The sea-ice theory is flawed, but no one has been able to better it yet. One has to ask how sea-ice can produce an effect so real that it is: (a) the right way up (b) has the right colour contrasts (c) has the right shape (d) has the right proportions and dimensions to fool Peary, MacMillan, Green and even some of their Eskimos. Crocker Land did not vary in direction. Crocker Land was right there eight years after Peary had seen it. And it lay in exactly the same direction and could be seen from the same spot again. On each occasion its reality was so great that no one doubted it was real – except when they realized they could not reach it.

There is one final aspect which makes the description of Crocker Land unlike anything ever seen before. Its sheer dimensions are staggering. MacMillan describes it as covering at least 120 degrees of horizon. In his final sighting the frontage seems to be even greater. I know of no mirage with a frontage that wide. It covered a full one-third of a circle, if not more. What could have created a mirage this spectacular?

MacMillan made it clear that the impetus for the expedition resulted from testimony other than Peary's. In Appendix VII of his book he records: "Statements concerning the possible existence of land in the Polar sea. Captain Richardson, in his work "The Polar Regions", says 'The Eskimos of Point Barrow have a tradition, reported by Mr. Simpson, surgeon of the Plover (in 1832) of some of their tribe having been carried to the north on ice broken up in a southerly gale, and arriving, after many nights at a hilly country inhabited by people like ourselves, speaking the Eskimo language, and by whom they were well received. After a long stay, one spring in which the ice remained without movement they returned without mishap to their own country and reported their adventures. An obscure indication of land to the north was actually perceived from the masthead of the Plover when off Point Barrow."

"In 1850, Captain McClure, when off t he northern coast of Alaska, wrote in his journal that, judging from the character of the ice and a 'light shady tint' in the sky, there must be land to the north of him."

"Marcus Taker, writing in the 'National Geographic' magazine 1894, under the title of 'An Undiscovered Island off the Northern Coast of Alaska, says: 'It is often told that natives wintering between Harrison and Camden Bays have seen land to the north in the bright, clear days of spring. In the winter of 1886-87 Uxharen, an enterprising Eskimo of Ootkearie was very anxious for me to get some captain to take him the following summer with his family, canoe, and outfit to the north-east as far as the ship went, and then he would try to find this mysterious land of which he had heard so much; but no one cared to bother with this venturesome Eskimo explorer."

"The only report of land having been seen in this vicinity by civilized men was made by Capt John Keenan of Troy, New York, in the seventies (1870s) at that time in command of the whaling-bark Stamboul of New Bedford. Captain Keenan said that after taking several whales, the weather became thick, and he stood to the north under easy sail and was busily engaged in trying out and stowing down the oil taken. When the fog cleared off, land was distinctly seen to the north by him all the men of his crew, but as he was not on a voyage of discover, and there were no whales in sight, he was obliged to give the order to keep away to the south in search of them."

"In June, 1904, Dr. R. A. Harris of the United States Coast and Geodetic Survey, published in the 'National Geographic' magazine his reasons for believing that there must be a large body of undiscovered land or shallow water in the polar regions. He based his theory upon the report that Siberian driftwood had been picked up in South Greenland, upon the observation of drifting polar ice, upon the drift of the ship Jeannette, and upon numerous tidal observations made along the northern coast of Alaska and eastward."

Polar Images -

The polar regions are well known for their mirages. A mirage is an optical illusion caused by the refraction of light passing through layers of atmosphere of varying density. Mirages are often seen in warm climates. The inferior image is the most common type seen under these conditions. The air above a hot surface lies in layers of varying density. An inferior mirage causes the distant, nearly level desert surface to assume the appearance of a sheet of water, especially if one observes from a slight elevation or simply from a point above the heated layer. The same effect occurs over a hot road. The 'water' is really an image of the sky. One can sometimes observe objects below eye level on this 'water' surface. These objects are usually inverted. Superior mirages are found in cold regions and in conditions where there are strong temperature inversions. They are less common and more spectacular than inferior images. Distant objects (often over a sea horizon) are seen upside-down in the sky. There may also be an upright image of the same object above the inverted one. When such a mirage is seen on land, all the trees and other landscape features are inverted, and in all cases of superior mirage, the images are more clearly defined than in an inferior mirage. Superior mirages are not, as is commonly supposed, caused by reflection from a surface above the spectator. The

explanation is complicated and involves the action of the wave fronts of light as they progress through strata of varying density.

Was Crocker Land a mirage? Definitely. Firstly, MacMillan's Eskimos declared it to be 'mist'. Mirages are unstable. Nevertheless, in spite of its amazing stability, Crocker Land had to be a mirage. They watched it change during the day as the Sun moved. Furthermore, it did not lie 120 miles from shore as Peary had thought. As MacMillan approached it, he found it receding. Also, when in fact he knew it could not possibly be. Now if Crocker Land was not a mirage of something much further away? Could this be true for Keenan Land and for Sannikov Land too? Could these lands somehow be related? Could these be different views of one single gigantic missing Polar continent?

There is an aspect of the mirage theory which poses a problem. Superior images are normally upside-down! Nobody ever said these lands were upside-down. If these explorers had seen upside-down, they would have mentioned it. These mirages were so real-looking in every detail that no one suspected they were mirages until someone went closer. The most common incarnation of a superior mirage results in a distorted upside-down image. Less often however, superior mirages have another image above them which is the right way up. Could it be that Crocker Land is an instance where, for some unknown reason, we are only seeing the top image? If so, then why don't we see the lower inverted image? I have not come across any mention that only the top part of such a mirage can be visible. What could cause this? The only reasonable explanation for Crocker Land must be the one which at first seems impossible Crocker Land can only be caused by mountains and real land somewhere nearby in the Arctic Ocean. It must lie 200 or 300 miles from where Peary and MacMillan saw it. But it can't be too far away er else the light would not be able to travel that distance through the atmosphere.

Can people see mirages of real objects over a considerable distance? Billy Baty, who helped with this book, told me the following story about a mirage of the city of Corpus Christi: "... People in the Rio Grande valley not too far from where I live have seen a mirage of a city on many occasions. It was discovered the mirage city was Corpus Christi which is a hundred or so miles away. I actually knew a man who saw the mirage city on at least two occasions. Apparently the image would last for hours and when it would disappear, you could drive a small distance and see it again. Sometimes it would appear on the following day." There are a number of instances where objects have been seen which are below the horizon. There are also a number of instances where objects have been seen at a considerable distance as if they were magnified by some kind of 'atmospheric lens'. (Examples given are omitted in this summary except for this final one.) Captain Robert Bartlett was in command of the schooner Effie M. Morrissey. He had experience sailing in polar waters for forty years when he saw the clearest mirage of his life. At 16h00 on 17 July 1939 his ship was between Cape Farewell on the southern tip of Greenland and Iceland . The Sun was lying in the south-west when the Captain and crew saw: "... the Snaefells Jokull (4,715 feet) and other landmarks (of Iceland)... were seen as though at a distance of tweny-five or thirty nautical miles (instead of the actual 335 to 350 statute miles). 'If I hadn't been sure of my position and had been bound for Rejkjavik (Captain Bartlett said), I would have expected to arrive within a few hours. The contours of the land and the snow-covered summit of the Snaefells Jokull showed up almost unbelievably near." We are therefore able to establish that under certain strange atmospheric conditions, a mirage can be magnified to make land appear to be 10 or more times closer than it really is.

Why isn't Crocker Land on our maps by now? Even if MacMillan did not find it, surely t he USAF or US Navy should have found it decades ago? What of the extensive Russian sea and air searches for Sannikov Land earlier this century? Did they also come up empty-handed? Or did they find something they would rather keep under wraps? The Russian and American military have scrutinized every square inch of the polar regions. Maps made of the Arctic Ocean seafloor by nuclear submarines of the US Navy were classified for 25 years. Could it be that Crocker Land does not technically belong to the outer surface of the world? Could it be that Crocker Land lies 'below the surface' of this Earth? Could it be that some strange geographic and atmospheric conditions exist there which exist nowhere else on Earth? Could it be that Crocker Land lies in a Polar Hole?

Now let's think about that. Remember the debate I mentioned regarding warm or cold air exiting from an Inner Earth? Arctic mirages occur early in spring and summer in this region where MacMillan and peary were. Peary saw Crocker Land in June, while MacMillan saw it at its finest in April and May.

The geography of a Polar Hole must have some effect on temperature and weather in the vicinity. For example, would that land not lie in eternal darkness throughout the winter? And what of the temperature of the air coming from inside the Earth? Could this create a natural, circular belt of air above, and around a Polar Hole? Could air from inside the Earth create a naturally occurring temperature inversion in such a hole? Would this mean that light from Crocker Land, Sannikov Land and Keenan Land always passes through certain layers which refract the light in a certain way? Are the temperatures there causing light to be refracted along the curvature of the Outer Earth? According to the various accounts I have presented, the Polar continent seems to be enormous in size. Does the circular rim of a hole also have a circular layer of air of a certain density which then causes a natural focusing effect on light passing out of it? Could it result in greater lateral magnification thereby making the land appear wider than it really is? Would this explain why Crocker Land covered such a large frontage?

Finally, why is the lower, inverted image of Crocker Land never seen? Remember that anomalous Earth curvature which I hunted for so fruitlessly? Well, maybe I've found it. What would happen if this mythical mountain existed inside a Polar Hole where the curvature is much more pronounced? Could it be that the anomalous curvature of a Polar Hole blocks the rays of light which would normally form the lower inverted distorted image in a superior image? Light rays carrying the superior image may be so refracted that they are never seen by the human observer because of the curvature of the Earth in the vicinity of a Polar Hole. On the other hand rays carrying the upright image are so refracted that they take a higher path through the atmosphere and they are then seen by the observer. Could this be the scientific explanation for Crocker Land , Sannikov Land and Keenan Land? This explanation neatly dove-tails with my other thoughts which suggest that Crocker Land lies much further away than even MacMillan thought. Crocker Land could be 350 miles, and perhaps even more, away from where MacMillan saw it on 21 April. The behaviour of the pack-ice also suggested that MacMillan was still far away from land.

Let us suppose someone were to set out towards Crocker Land and they did not turn back. At first they may see it from time to time, as the weather allows, as clearly as MacMillan and Peary did. As they approach it and begin entering the Polar Hole, they will see it gradually rising in the sky. Below it, gradually rising also, will be an inverted and distorted image of Crocker Land . By now they should be seeing the mirage much more often. But Crocker Land will still be far away. They will need to travel further still. And as they do so, they will see both images still rising, and below these images they will see the Crocker Land mountains – for real.

What will they find on Crocker Land when they finally set foot upon its shores? As they wander through its hills and valleys, will they meet Eskimos who technically are dwellers of the Inner Earth? Will these Eskimos be able to direct them to the City of Shamballa?

CHAPTER 17 - THE HOLE THROUGH THE EARTH -

Dr. Frederick A. Cook is the most discredited explorer in all of Arctic history. Cook was so thoroughly discredited that I never once thought of even looking into the issues regarding his claim to have reached the North Pole before Peary. It was only while paging through Wally Herbert's "Noose of Laurels" that I saw Cook's map of his attempt on the North Pole. As I looked at this map I noted the proximity of two large pieces of land which can no longer be found on any map: Crocker Land and Bradley Land. My curiosity revolved around the proximity of these two pieces of land which were independently 'discovered' by the most prominent polar explorers of the time. Was this just an accident or was there more to this apparent coincidence than met the eye?

(The author gives an extensive biography of Dr. Cook detailing the attempts to discredit his claims to have climbed Mt. McKinley and to have been the first to reach the North Pole. He describes the attacks on Cook's character, but also gives character references to show that Cook was not the type of person his critics tried to portray him as. Besides being discredited, he was imprisoned for mail fraud at Leavenworth Federal Penitentiary.)

Cook's Human Relations -

So far we have discussed Cook's abilities as an explorer. But in pondering his fights with Peary, it is worth considering him as a human-being. He was trained as a medical doctor. What was his attitude towards his fellow creatures? Was he the type of person disposed to lying and taking advantage of them? Peary and his supporters have made the case for decades that Cook is a liar and a fraud. They portray him as a bumbling fool, intent on the most childish sort of cheating. History portrays Cook as a con-man who perpetrated one great fraud on the heels of another. Cook is depicted as a man without standards, without any shame, without any decency whatsoever. Is this a correct assessment of him?

Prof. Ralph Myerson kindly sent me information regarding Dr. Cook's contributions to medicine. Cook was often brave and innovative. It is worth considering his actions and some of his deeper thoughts. Here is some of what Prof. Myerson sent: "During the Belgian Antarctic Expedition, Dr. Cook made important innovations in the construction of tents, light-weight sledges, protective clothing, and sun glasses. He was also instrumental in freeing the ice-bound 'Belgice' by suggesting and supervising the construction of channels in the ice leading to open water. Roald Amundsen, the first mate aboard the 'Belgica', regarded Dr. Cook as his mentor and developed a firm, life-long friendship that endured during Dr. Cook's later trials and tribulations. In 1901 Dr. Cook sailed to Belgium where he and the rest of the 'Bellgica' officers received several awards including the coveted Order of Leopold."

"Later in 1901 he responded to a request from the Peary Arctic Club to join a relief party to Greenland and perform a physical examination on Peary. There was concern because Peary had been in the Arctic for four years and hadn't been heard from in two years. Although a rift had already developed between the two men, Cook agreed and performed a remarkably t horough and accurate examination on Peary at Etah. He is said to have made the diagnosis of pernicious anemia, the ultimate cause of Peary's death and recommended that Peary eat a large amount liver. This was 20 years before Minot and Murphy were awarded the Nobel Prize in medicine for recommending liver as a treatment for pernicious anemia."

"During his incarceration at Leavenworth Federal Penitentiary. Dr. Cook rendered valuable medical care to his fellow inmates, about a third of whom were drug addicts... Cook wrote: 'I was led to believe that modern civilization is going under the cloud of a plague, more destructive in its economic strain than that of all the wars in history. The opium blight, if not checked, will eventually sap the life blood of half of mankind.' Dr. Cook developed a treatment plan for the addicts which was based on non-specific supportive measures of water, exercise, sunlight and fresh foods plus a program of lectures and assistance aimed at rehabilitation. It may well have been one of the first such programs... Despite the controversy that surrounded Cook during his later life, even his critics and detractors are ready to recognize the above contributions made by him."

The Cook-Peary enmity contrasts strongly with the deep friendship which existed between Cook and Amundsen. Amundsen even came to visit him in prison. Amundsen was always a loyal friend and never forgot his mentor. That someone of the calibre of Amundsen should remain friends with Cook through thick and thin, to the bitter end, speaks volumes. If Cook was the bumbling childish cheat which Peary's supporters claime he was, then surely Amundsen would have seen this and agreed with it? Yet Amundsen always believed to the end that Dr. Cook had indeed reached the North Pole first. Amundsen once remarked that Dr. Cook was: "The most extraordinary explorer I have ever met."

Did Cook Reach the North Pole?

A few years before Dr. Cook died he wrote the following: "I have been humiliated and seriously hurt. But that doesn't matter any more. I'm getting old, and what does matter to me is that I want you to believe that I told the truth. I state emphatically that I, Frederick A. Cook, discovered the North Pole."

(In pondering what I had seen in Herbert's book) I was stunned by the realization that Cook had in fact been much closer to Crocker Land than Peary had been. Not only that, but Cook had marked new islands on his map. Stranger still, he had photographed Bradley Land! Cook later said that he had looked for Crocker Land, but that it did not exist at the location given by Peary. However, Cook had seen, photographed and pinpointed the location of Bradley Land. Neither Crocker Land nor Bradley Land can be found on any maps of the Arctic today. I posed this question to myself: Had Peary, Cook and MacMillan all told the truth back then? Their testimonies are amazingly consistent and definitely

complimentary. In reviewing the evidence, I came to the conclusion that the only instance of lying seems to me to have been when Peary, with the connivance of MacMillan, set out to discredit Dr. Cook's claims to the Pole. It is possible that both Cook and Peary did indeed reach the North Pole.

Having studied their accounts, I am of the firm opinion that there is missing land up in that region of the Arctic . I further suggest that Bradley Land may be distantly related to Crocker Land . The rediscovery of Bradley Land may go a long way to t racking the Crocker Land mirage back to its roots. This should also lead us to finding out why these lands have been kept secret for so long. I believe we will find that we have discovered a Polar Hole.

Let us examine a detailed paper produced by Sheldon Shackelford Randolph Cook, who is historian of the Cook Society. In March 1998 he produced a paper entitled "Frederick Albert Cook, Discoverer of the North Pole. April 21, 1908 A Statement of the Evidence." He wrote: "Historically, the strongest supporting evidence, the proof, the final confirmation of an explorer's claim to discovery has lain in the verification of his descriptions of the geographical area first seen, reached and traversed by him by later exploration. If his first and original descriptions of this region are confirmed and verified by later exploration, then his claim to discovery is validated and established; if not, then his claim is disproved or rendered questionable... Frederick Albert Cook's first and original descriptions of physical conditions and natural features at the North Pole and in the region of the Central Arctic Basin through which he sledged have been confirmed and substantiated by later exploration in detail after detail,..." Sheldon then provides supporting evidence on a point by point basis.

The description above is critical when considering whether Cook was the first to reach the North Pole. How could he have reported these conditions if he had never been there? Remember, no one else had been there either and conditions were different to what had been expected. Cook was unable to return to Greenland before winter set in and he was forced to spend the winter in Canada unable to reach his food caches. He and his Eskimos nearly perished that winter. Nevertheless, with incredible courage and ingenuity he survived. His attempt on the North Pole had thus taken much longer and been far more dangerous than the conditions encountered by Peary. This makes Cook's assault on the Pole all the more amazing.

Renewed Support for Cook -

(Statements of several people are given showing increasing acceptance of Cook's claims both to having climbed Mt. McKinley and been the first to reach the North Pole.)

Bradley Land -

That three different teams of explorers (led by Peary, Cook and MacMillan) should report land in virtually the same region seems to defy coincidence. Ever since I looked at Herbert's book "Noose of Laurels" I wondered if there was a connection between Crocker Land and Bradley Land. Initially, I wondered if Bradley Land was an outlying island not far from the continental land mass of Crocker Land. I have also wondered if Bradley Land and Crocker Land might perhaps be one and the same. (Much discussions follows concerning the reality of Crocker Land and Bradley Land and of the authenticity and implications of the photograph which Dr. Cook took of Bradley Land. Statements are given as to whether the photo was taken in the location claimed and whether it depicts actual land or an ice island. Problems of distances and shapes are also analyzed.)

The Bradley Land photograph contrasts strongly with another feature which Dr. Cook called the 'submerged island'. This is glacial ice floating on the sea very close to the North Pole. Photographs of the 'submerged island' and Bradley Land exist and they are two very different features. The Bradley Land photograph shows hills of considerable size whereas the 'submerged island' is nothing more than glacial ice at sea-level. Dr. Cook thought this ice was resting on a submerged piece of land, hence he called it the 'submerged island'.

Just when you thought there could not be any more twists to the story, let me add one more. Wally Herbert uses the 'fact' that there is no land up in the Arctic as the cornerstone for his arguments against Dr. Cook. In his book he has a photograph of the 'submerged island' of glacial ice at sea-

level. He then goes on to claim that Dr. Cook did not print the entire plate in his book. He claims that when this original plate is reproduced fully, one then sees a chunk of land on the right-hand side. He reproduces this fuller version of the photograph in his book. Herbert then states that this clearly shows the 'submerged island' to be a glacier resting on dry land! In this version of the photograph one can indeed see an enormous piece of dark rock which is many times taller than Cook's companions. Judging by the slope of the rock, it seems as if this is the edge of a much higher hill of great size. Since there is no land close to the North Pole, Herbert then claims that Dr. Cook was a liar. But wait. Dr. Cook said the 'submerged island' was ice which rested on submerged land a mere 120 miles from the North Pole. Could it be that there really is some rock jutting out above sea-level there? Could this be part of a shallow continental shelf related to land which really exists some distance away? To tell the truth, I don't really believe this myself. I think something funny is going on. The piece of rock in that photograph is very large - perhaps 30 ft high, maybe more. It's very hard to tell. But it is very large and must weigh many tons. It appears to be part of a much larger feature. I find it inconceivable that Dr. Cook would spend so much time talking about glacial ice when he could have marked this piece of land on his map as well. His sledges were a few hundred metres away from it, and he could have walked upon it. His testimony contradicts what is in this 'full' photograph. He referred to the 'submerged island' - believing that the glacial ice rested on land beneath sea-level. Now if some land actually stood out, he would surely have drawn attention to it, especially if it was this large. But he did not. He did not remark upon the northernmost island on the face of the Earth. Strange.

I am suspicious of this photograph. Wally Herbert claims he found t his photograph in the Library of Congress collection of Dr. Cook's material. As will be seen later, Herbert also discovered that key photographic plates were missing from the Cook collection. Who took them? Dr. Cook's photograph of Bradley Land was missing, as well as the photograph taken at the North Pole. Could it be that the US government itself has been fiddling with Dr. Cook's polar material in the Library of Congress? I am highly suspicious of this piece of rock in the 'full' 'submerged island' photograph. Could it be that this photograph has itself been manipulated by someone in a sophisticated attempt at further discrediting Dr. Cook? If there really had been land at that latitude, then why did Dr. Cook not mention it? We could always fall back on the 'fake photo' theory, but to do so would be to ignore the much greater evidence to the contrary. Is it possible that someone could actually produce a faked plate and place it in the Library of Congress, while removing the original? Who on Earth would have the scientific capability to produce a specially manipulated plate like this? Unless someone in the US government and US military has gone to great lengths to attempt to discredit Dr. Cook - in an attempt to hide Bradley Land and the drifting glacial ice of questionable origin. These people may feel it better to encourage researchers to look towards Axel Heiberg Island where these photographs were supposedly faked than to have potential explorers flying and traversing the Arctic Ocean where Crocker Land and Bradley Land might exist.

It is strange that the Cook Society puts itself squarely behind Dr. Cook and then suddenly makes an about turn on the above point refusing to accept his estimates and conclusions regarding Bradley Land. If he was the competent explorer they claim him to be, then why are they abandoning him on this point? The photograph of Bradley Land poses serious problems for the Cook Society. Much as they would like to believe him, they are faced with the 'fact' that land does not exist at the location given. This puts Sheldon Cook in a tough spot and he clearly recognizes that he might be faced with a losing battle. So he tries to hedge his bets both ways: "If glaciologists should eventually determine that the photograph of Bradley Land in Cook's book in fact depicts ice-sheathed land rather than an ice island, it must be concluded that Cook simply used a photograph of a feature which as nearly as possible approximated what he had seen west of his line of march for the purpose of illustrating his book..."

I think Sheldon is undermining his entire position by proposing that Dr. Cook started taking photographs to 'represent' things he had really seen. I know of no rule of exploration which allows one to do this. If Cook ever did this, then the onus would have been on him to state so openly in his book. He claimed these things were fact and stood by his claims until he died. Bradley Land and the submerged island are the two most important physical features he saw during his assault on the North Pole. For key Cook supporters to begin using this type of logic is highly dangerous. If Cook used photographs to represent physical features, how can we then trust his photographs taken at the North Pole? Sheldon is opening up a Pandora's box filled with problems for Dr. Cook by following this line of reasoning. In a sense, his reasoning leads almost to a direct admission that Dr. Cook was making things up as he went along. And yet, there is so much evidence to the contrary. As Sheldon

acknowledges, making up evidence is a highly dangerous undertaking because other explorers will be checking up on it. For example, Cook's photographs show the enormous hills of Bradley Land. Now what if someone were to go there and find a different configuration? What then? Such things would not go unnoticed, and Dr. Cook would be called upon to explain this discrepancy. In fact, one of the 'rules' of exploration is that later explorers must check upon and confirm the discoveries of those who went before. Photographs, maps and written descriptions are therefore taken very seriously by geographers and later explorers.

The photograph (Plate 31 in the book) may provide us with the answer to the problem. Take a look at the hills shown in this photograph. The hills cover most of the horizon, except for a region in line with the first sledge. At this point there appears to be a gap in the line of hills. When Dr. Cook plotted the coastline of Bradley Land, he drew it as two separate, distinct pieces of land, separated by a gap of several miles. That gap seems to be evident right there in that very photograph. Would you have me believe that he went looking for a feature of the right size, with just such a gap, elsewhere, for photographic purposes? Why should this photograph seem to reflect, exactly, the facts as he plotted them on a map?

Wally Herbert mentions another interesting point: "The search for 'Bradley Land' is made even harder since the only picture available is the one in his book, the original plate is missing from the Cook Collection in the Library of Congress, as are also the plates of the two other crucial pictures: those of his 'North Pole' camp and his 'summit picture' of Mt. McKinley." I find it very interesting that all the original plates in support of Dr. Cook's claims are now missing. All we have left are the photographs which are in his books. Now why would all these originals 'go missing'? Or has someone deliberately removed them to undermine Dr. Cook's position? Did Peary's supporters remove these photographs? Or did military officials go to the Library of Congress to remove these originals at a later date? Or was this sanctions by the US Government itself?

What do we make of the 'full' 'submerged island' photograph? Why did Dr. Cook not reproduce this? Or was this plate produced and placed in the Library of Congress in recent years by a US Government which is intent on hiding something in the Arctic? From day one, the US Military had it in for Dr. Cook. Peary, MacMillan and all their military supporters set out to destroy Dr. Cook. Did they do this merely from jealousy or were they, back then, already aware that something untoward might exist in the Arctic ? There was much Hollow Earth discussion going on in the decades prior to the discovery of the North Pole. Were the US Government and the US Military back then already interested in the subject? For more than a century prior to the discovery of the North Pole, there had indeed been much said and written about a possible entrance into an Inner World via a hole in the Arctic . Many people had attempted to bring this to the attention of various governments, especially the US Government. These governments never put much stock in these bizarre theories. However, they must certainly have been aware of these ideas. I follows therefore, that if any credible evidence were to later surface, these governments might very quickly have realized the true significance of what was going on and taken action immediately. The issues regarding Crocker Land and Bradley Land at first might not have meant much to anybody. Peary and MacMillan were probably motivated by jealousy alone and nothing more. However, much later, perhaps during the Cold War, the true importance of these discoveries might have become apparent. This may have required that further action be taken to ensure that no one ever looks seriously into these issues. This might explain the strange happenings to Dr. Cook's material in the Library of Congress. It might have required that a more subtle and sophisticated attempt be made to ensure that Dr. Cook remained discredited for the time being perhaps while the governments concerned try to find out what is really going on inside the Earth.

What conclusion can we draw regarding Dr. Cook's journey to the North Pole? (The author reviews and speculates on the information recorded by Cook, Peary, and MacMillan concerning Crocker Land and Bradley Land.) Remember that Peary and MacMillan saw Crocker Land to the North West? And Cook saw Bradley Land due West. If one draws their line-of-sight on a map it then results in these lines meeting at a single spot some distance west of both Crocker Land and Bradley Land. Is this where Crocker Land and Bradley Land physically exist. Maybe. The thought that Crocker Land and Bradley Land may be one and the same, and that they lie further west of their supposed positions is tantalizing. This could explain why Bradley Land has also not been found yet – at least by civilian explorers. Perhaps the key to the whole problem is to travel further west of the positions given for these lands?

The Map Evidence -

While I was looking for old maps, Billy Baty happened upon an old map in a text book. Unfortunately we could not discover the origins of this map. Nevertheless, it had some interesting notation on it. Up in the region directly north of the Bering Strait, but falling short of the North Pole, it had the notation "This sea is probably never completely closed". This notation was in the region where Lt. DeLong would have expected to find his Polar continent. One can't help wondering what caused the mapmaker to reach this conclusion, but it has overtones of the Open Polar sea.

Let us also hark back to earlier chapters such as the one on meteorology. In the chapter it will be remembered we discussed the origin of strange clouds which seemed to somehow be related to the Earth's magnetic poles. The direction in which these clouds moved, depending from where they were spotted, seemed to suggest that they originated from the Earth's magnetic or geomagnetic poles. These same clouds, when seen from the USA, did not seem to have that orientation. This is understandable if their real point of origin lay somewhere between the North Magnetic and the Geomagnetic North Poles. Crocker Land and Bradley Land lie at a spot equidistant – almost – from these points as well. Could it be that these lands lie near a Polar Hole? If so, could it be that these strange clouds really originate from a point close to Crocker Land and Bradley Land and that depending on one's longitude, one would mistakenly think these clouds are aligned with the magnetic poles?

The Reader has probably wondered about the relationship between a Polar Hole and the Earth's magnetic field. Should a Polar Hole not coincide with either the North Magnetic Pole or the Geomagnetic Pole? This is a question which I have wondered about many times myself. Strictly speakinig, if the Earth's magnetic field originates from inside the Earth, then the magnetic lines of force should direct us straight to a Polar Hole. By this definition one should find a Polar Hole exactly at the Geomagnetic Pole. The Geomagnetic Pole lies between Canada and Greenland. The aurora and the Earth's entire magnetic field are centred upon this ppoint, and this is the logical place where one should find a Polar Hole. The North Magnetic Pole lies closer to the Beaufort Sea – and it moves considerably. The Russians believed for a long time that another magnetic pole lay in Siberia as well, and that magnetic lines of force bunched together across the Arctic between the Siberian and Canadian Magnetic Poles. These lines of force come very close to mystery sediments which lie very close to Bradley Land and Crocker Land. Larry Newitt, the Canadian scientist who has determined the position of the North Magnetic Pole in the Queen Elizabeth Islands near the Beaufort Sea, told me that the Russians later dropped their theory of the Russian/Siberian Magnetic Pole. He stated that they believed in it right up to the 1980s.

As was mentioned earlier, since the Earth's crust is essentially rigid, it is highly likely that large quantities of ore are down there. This ore very probably distorts the Earth's magnetic field thereby creating a situation where the North Magnetic Pole is a considerable distance from the Geomagnetic Pole. Strictly speaking, the North Magnetic Pole should also be at the Geomagnetic Pole. And both of them should actually be at the North Pole because that is the axis about which the Earth spins. The mere fact that the North Magnetic Pole lies a considerable distance from the Geomagnetic Pole is itself anomalous. This clearly indicates that a considerable distortion of the Earth's magnetic field occurs near the surface. This being the case, it is to be expected that the geomagnetic field is so distorted that the Geomagnetic Pole does not coincide with position of a Polar Hole. However, a Polar Hole cannot lie too far away from the Geomagnetic Pole. I drew a triangle between the Geomagnetic Pole, the North Magnetic Pole, and the site of the 'Russian Magnetic Pole'. One would expect a Polar Hole to lie either within, or close to this triangle. The evidence suggest to me that the line connecting the North Magnetic Pole and the 'Russian Magnetic Pole' is the place to start looking. In Figure 17.2 we see Keenan Land marked near the coast of Alaska . Note too, the Eskimo sightings of land from Camden and Harrison Bays in Alaska . Could it be that these Eskimos were really seeing a 'telescopic' mirage of land which lies much further north? Could Capt. Keenan's sighting of land actually be a sighting of that same land? Perhaps. If so, the suggestion is that land must lie somewhere up in the Beaufort Sea . And what of the Eskimos who actually traveled to this land and found other Eskimos living there?

My information regarding Sannikov Land is scant. I had wondered if Sannikov Land might simply be the Crocker Land mirage seen from the other side of the Earth. However, that does not seem to be the case because the Russians saw it to the north and north-west. Sannikov Land might be a problem similar to Bradley Land, but from the Russian point of view. Sannikov Land might simply be land lying in the far north, not far from a Polar Hole. Its existence might be covered up for the same reasons that Bradley Land's existence is denied. It might simply be too close to a Polar Hole for comfort to allow civilians to wander in its vicinity.

When all these sightings of land and the meteorology are taken into consideration, we find ourselves contemplating the existence of land and a possible Polar Hole somewhere due north, or slightly NNE of Alaska, falling short of the North Pole by approximately 5 degrees. Many people will of course say this is totally impossible. What of those, such as Wally Herbert, who traveled up there in the 1960s? This make me wonder. I have pondered Wally Herbert's motives for doing such a nasty hatchet job on both Dr. Cook and Peary. Could it be that some of these expeditions across the Arctic have been staged so as to make us think people have been in a certain region when in fact they have not? Wally Herbert was well aware of the slow speed at which his expedition traveled. This has subsequently been highlighted by comparisons with Peary and with Will Steger's 1986 expedition. Herbert accounted for this by saying that he had to make a considerable number of detours around pressure ridges with his heavy sledges. Really? Or was Herbert making a detour around something else? A Polar Hole maybe? One should not exclude the possibility of sophisticated deception. If something is of critical importance, then clever people, in positions of power, might well go to great lengths to cloud the issues to ensure that these things are not discovered by accident. These are probably patriotic people who are convinced of the correctness of their actions.

Could Wally Herbert's vicious attacks on Dr. Cook and Peary have the deeper motives of discrediting their testimony of Crocker Land and Bradley Land? Consider his theory that Peary lied about Crocker Land simply to ensure that he could raise money for future expeditions of his own. MacMillan's first-hand testimony of Crocker Land makes nonsense of that idea. Scientists, to this day, recognize that something is not quite right with the problem of Crocker Land, and no one has come up with a truly satisfactory explanation for it. Since Cook had been thoroughly discredited, the possible existence of Bradley Land was never taken seriously. But, even the Bradley Land mystery is slowly coming to the fore again as people take a renewed interest in Dr. Cook.

There is visual evidence which suggests that a certain region of the Arctic , slightly off-set from the North Pole (by about 5 degrees) is open to suspicion. Strange, off-beat things have been seen here by famous explorers. None of these things, including the strange meteorology we have discussed, seem to make much sense within the bounds of our science. So far we have only concentrated on Cook, Peary and MacMillan. But, has anyone else seen any indication of land up in this part of the Arctic? Take a look at this introductory e-mail which I received from Prof. Myerson on 17 June 1998: "Allow me to introduce myself as Ralph Myerson, MD, Vice-President of the Frederick A. Cook Society. Russ Gibbons has furnished me with a copy of your correspondence... I have no expertise in your research; my interest lies mainly in the area of Dr. Cook's medical talents and the many incontrovertible contributions he made to polar medicine. I do recall, however, that when Amundsen visited Cook when the latter was serving time in Leavenworth Federal prison (another sad story of a travesty of justice), he (Amundsen) expressed some belief in the existence of Bradley Land and stated that when he flew over the area of its location, he saw land birds in the region, too far for them to have come from the Canadian archipelago."

Soil From Inside the Earth?

Consider the following scientific evidence from the magazine "Discovery": "How did sand and gravel, typical of sea-shores and river beds respectively, reach the deep ocean bottom of the Arctic hundreds of miles from the nearest land? This has been the puzzle facing the American researchers who have been analyzing ocean-bottom samples dredged up in the Central Arctic Basin not far from the North Pole from the IGY drifting station Alpha, a temporarily occupied ice floe which circulated in the region between 84 and 85 degrees N, 138 to 152 degrees W during eighteen months of 1957-58." The article in "Discovery" went on to say that this analysis was the most comprehensive ever undertaken in this 'inaccessible region' of the Arctic . The scientists thought the mysterious sand and gravel were a 'most remarkable feature' of this part of the Arctic Ocean . They wanted to know where these sands and gravels originated from. They concluded that the sand was not carried there by water because the particles showed very little 'rounding'. Experience had shown that even a journey of less than 500

metres through water increases the roundness of particles by several factors. Yet, the gravel must have traveled several hundred kilometres at the very least, in a straight line, to have originated from one of the existing landmasses. Considering that the water in the Arctic Ocean travels in a circular fashion, this translates into a journey of at least 'thousands of kilometres'. The scientists went on to suggest that the soil got there by 'ice rafting'. The problem with this suggestion is that there would have to be ocean currents capable of transporting large quantities of sand and gravel towards the North Pole. But from which rivers did these sands and gravels originate?

Let us take a closer look at the transport problem. Firstly, there are no currents which flow directly towards this spot. The entire ocean in this region tends to flow in a circular fashion. At first glance the Reader might think that these sands and gravels originated from the Canadian Islands. However, the problem here is that there are no rivers on these frozen islands of the far north. The most likely rivers which could have provided the gravel are actually in Alaska. But for the soil to have been transported from Alaska (or even Canada) would require it to travel a considerable distance along a circular route out into the Arctic Ocean. Unless the soil was transported on top of the ice, the soil would have been rounded by travelling through water. Life in the distant Arctic seems almost impossible to consider. And yet, the sub-Arctic, in Canada for example, is much colder than it is out there in the middle of the Arctic Ocean. Do these sediments originate from Crocker Land or Bradley Land? Do rivers flow there? Are there perhaps hot springs up there which make the climate milder thereby enabling some Eskimos, birds and other animals to live up there?

Winds From Nowhere -

Dr. Cook mentioned the considerable haze which was present during his trip to the North Pole. He described it as a bluish haze. Consider the following strange information from "Mosaic" in 1978.

Every year, in March and April, a strange haze descends upon the clear pristine air of Alaska . This haze lies at an altitude of 10,000 ft and gives the sky a whitish, diffuse look. When seen from an aeroplane, it causes the horizon to disappear completely. Scientist studied the haze to try to determine its origin. They discoved it was largely made up of: (a) Dust (b) Sulphuric acid droplets. Scientists concluded that the dust and sulphuric acid "... must be imported because there are no sources of such materials in the Arctic ." They theorized that violent wind storms in the Gobi Desert might be responsible for the dust. However, the sulphuric acid was a greater mystery. They speculated that perhaps the sulphuric acid droplets were produced by Japanese factories and that it was then carried to Alaska by strong winds. However, they were not sure if this was really the correct answer. They concluded that: "These are speculation, though, and no one is sure where this haze comes from or how far it extends beyond Alaska into the stable, stagnant air over the Arctic Ocean ."

Do you remember the presence of sulphuric acid droplets in large quantities in the polar atmosphere of Venus? Could there be a link between such sulphuric acid mist and the Inner Earth? "Mosaic" stated that the haze actually extends far out into the Arctic, north of Alaska. Does this haze really come from Japan? Japan lies south west of Alaska. We know from Dr. Cook that a haze did indeed extend all the way up to the North Pole. Does this haze originate from somewhere near the North Pole? To the best of myh knowledge, Peary never mentioned this haze while on his journey to the North Pole. Could it be that this haze emanates from the region where Crocker Land and Bradley Land exist? Is there a link between this strange haze and Goesta Wollin's discoveries, and the other strange meteorological phenomena mentioned in earlier chapters? Does this haze provide a natural camouflage for Bradley Land and Crocker Land, making their discovery very difficult? Could this haze and mist be related to large numbers of hot springs on an unknown landmass in the Arctic?

Polar Holes -

I just cannot see how a sizable piece of land up in the Arctic could have remained undiscovered to this day. I have thus speculated on whether some of this land really belongs to the outer surface of our world as we know it, or whether it lies inside a Polar Hole of some kind. And how big could such a hole be? When I originally began this study, I had been driven by the idea of a tiny Polar Hole – perhaps as small as 50 miles across. But as I reach the conclusion of this study, I can't help wondering if it's much larger – perhaps 100 or 200 miles across. It still falls considerably short of the figure proposed by Marshall Gardner and others, of a hole 1,400 miles across. Nevertheless, it could

be hundreds of miles across. Such a feature would definitely have some effect on our weather and would help to explain some of the strange meteorological phenomena noticed by scientists. The eyewitness accounts of missing lands and continents of considerable size in the Arctic leave me wondering about the size of a Polar Hole and any land in or around it. It seems as if we are dealing with a landmass which is very large. It may be that the accompanying Polar Hole is also guite large.

The mirage theory seems to work quite well as an explanation for the strange mirage called Crocker Land. But the same does not quite seem to be true of Bradley Land. Does Crocker Land therefore technically belong to the Inner Earth while Bradley Land is some kind of outlier which belongs to the outer surface? Perhaps. If so, t hen why is Bradley Land not on any map? Coud it be because it lies near a Polar Hole?

But is there any other way of determining whether there is a hole right through the Earth? In an earlier chapter I speculated about the rising and falling atmosphere of the Earth. I have wondered whether some scientists have perhaps already discovered a hole through the Earth without realizing it. In the early 1980s, while browsing through the Pretoria Public Library, I came upon a book which discussed the effects of a nuclear war. It was a well-researched book, and I read it. Since the major powers of the world are located in the northern hemispher, and since a nuclear exchange is more likely to place in the northern hemisphere, the author made a point which surprised me. Scientists had concluded that very little radioactive fallout from the northern hemisphere would reach the southern hemisphere. The accuracy of this statement has been confirmed by other people who are knowledgeable in this field. Meteorology teaches us that winds tend to blow from the equator to the poles and back. Hence radioactive material blowing from the north towards the equator is very likely to be caught up by poleward winds and circulated back to the north. This will happen before the radioactive fallout manages to cross the equator into the southern hemisphere. The same is true for air moving from the South Pole to the equator - the air will be circulated back to the south.

On 26 April 1986 the worst peace-time accident to date occurred. Fires and explosions were caused by an unauthorized experiment at the Chernobyl nuclear plant in Russia . Thirty-one people died in the immediate aftermath and 135,000 were evacuated from areas around Chernobyl . Some areas were rendered uninhabitable and significant quantities of nuclear material were spread around Europe by the prevailing winds. Being aware of the virtual impossibility of nuclear fallout reaching the southern hemisphere, you can imagine my surprise on learning that scientists suddenly discovered radioactive fallout from Chernobyl - at the South Pole. This was reported in "Science News" in May 1990. Jack E. Dibb, a geochemist from the University of New Hampshire, collected samples from a snow pit about 38 Km from the South Pole. IN the deeper portion of the pit he and his colleagues found radioactive layers corresponding to the years 1955 - 1974. Above ground nuclear testing was at its peak during those years. They also found a radiation 'spike' which was approximately 20 - 30times greater than the normal background radiation levels. They found this 'spike' in the snow deposited near the top of the pit. This snow had fallen some time between late 1987 and early 1988. More specifically, they found that the radioactivity came from caesium-137 which does not occur naturally. Caesium-137 only comes from nuclear reactors or nuclear explosions. Scientists have discovered that it takes approximately 20 months for radioactive fallout from nuclear test in the northern hemisphere to reach the South Pole. The radioactive deposits from Chernobyl also took 20 months to reach the South Pole. Based on the discoveries of Jack Dibb et al, we can be absolutely certain that the radioactive fallout from nuclear tests and nuclear accidents in the northern hemisphere are indeed reaching the South Pole. But how? In a letter to "Nature", dated 3 May, Dibb's team proposed that the radioactive material rose high into the stratosphere, crossed the equator and then fell in central Antarctica . As can be appreciated, atmospheric scientists, who know how winds behave, were very skeptical of this explanation. These atmospheric scientists doubted whether significant amounts of Chernobyl fallout could ever cross the equator and be deposited at the South Pole.

The problem becomes even more mysterious because it turns out that there is no evidence whatsoever that the radioactive material ever crossed the equator to begin with. Radioactive material would have been detected at various places en route to the South Pole, and in other parts of Antarctica. But there was none. Furthermore, as the radioactive material continued its journey, there would have been less and less of it as it approached the South Pole. Instead, it turns out that there is a high concentration of this material at this one spot in Antarctica. Dibb tried to explain it by way of "... special wind patterns above the Antarctic might explain why the South Pole is the only spot in the

southern hemisphere where scientists have detected excess caesium-137 following the Chernobyl event." The mystery grows. But the atmospheric scientists disputed Dibb's explanation. It's one thing dealing with above-ground nuclear tests where perhaps some of the fallout did rise high into the sky and some of it did perhaps manage to get across the equator. But, they point out that none of this is true for Chernobyl . The radioactivity from Chernobyl never reached high altitudes as happens with the super-heated air in an atomic explosion. The Chernobyl material lay at a much lower level in the atmosphere. So how could it get from latitude 51 degrees N in Russia to the other side of the Earth? Jerry Malman from the Geophysical Fluid Dynamics Laboratory at Princeton also disputed Dibb's explanation. He maintained that water condensation in the rising air would have washed the caesium out. He could not conceive how any significant amount of matter could have crossed the equator. Malman's criticism is very valid, especially with respect to the humid air found at the equator.

So the mystery remains. How did low lying radioactive air from Chernobyl in Russia end up in a single spot at the other end of the Earth, along with other high-level radioactivity? Let's go back to Lt. Col. William E. Molett who told me that he had flown more often to the North Pole than anyone else. Lt. Col. Molett was the navigator on board of the modified bombers which were sent by the USAF in the 1950s to collect radioactive fallout at the North Pole. Molett flew 91 classified missions to the North Pole. Molett told me telephonically that the purpose of the missions at the time was to obtain air samples from the air above the North Pole. Why? Because the radioactive fallout from Russian nuclear tests were blown northwards and were concentrated at the North Pole by natural wind patterns. Over a period of almost five years, Molett continued with these regular flights to obtain air samples from the North Pole. These would be analyzed by American scientists to determine if the Russians had been conducting secret nuclear tests.

We now know that air currents will concentrate radioactive fallout in and around the North Pole. The conclusions of the atmospheric scientists who disputed Dibb's theory are therefore well-founded. So how then does this concentration reach the South Pole? Many Russian nuclear tests are conducted far north. I stand to be corrected, but I think the Russians conduct some nuclear tests on the Kola Peninsula which lies at the northernmost point in Russia . I am not sure if they ever conduct aboveground nuclear tests there.

What if there is a hole which goes all the way through the Earth? That is an option which scientists have obviously not considered. What if air sometimes gets sucked into this hole and is sometimes blown out of it due to changing air pressures and the changing seasons on the outside of the Earth? The atmospheric conditions inside a Hollow Planet, regardless of what they are, should be relatively stagnant compared to the outer surface. Any Inner Sun which may be there will remain relatively fixed in position and the surface will suffer from the same level of heat or cold, light or darkness throughout. Hence, there is no reason why atmospheric pressure inside a Hollow Planet should change much except when the Inner Sun itself becomes more active. The major meteorological driving force must therefore lie on the outside of the planet. It is the changing angle of the Earth with respect to the Sun which determines the seasons on the outside of the Earth. When it is winter at the North Pole, it is summer at the South Pole. I seems probably to me that when air is being sucked in through one Polar Hole, it must be blown out of the other. This does of course imply that there must be a slight interchange of hemispheric air at the equator to balance this scenario. It follows that some air may be sucked in one Polar Hole, and over time it might end up being blown out of the other. As an aside, let me add that the atmosphere inside t he Earth might be modified slightly by the conditions which are present there. Various chemical and other changes might be made to it while inside the Earth. A scientific study of air entering and leaving the Polar Holes might therefore teach us something about conditions inside the Earth.

Let us return to the Chernobyl problem. If a Polar Hole is located near the North Pole, it then follow that it would suck in the air with the greatest concentration of radioactivity in all of the northern hemisphere. Ove time some of this air would travel right through the Earth and end up being deposited somewhere near the South Pole. We can therefore infer that the entrances to this hole through the Earth lie somewhere near, but no exactly at, the North and South Poles. There are of course no Polar Holes marked on any maps, but one could consider trying to find them by way of weather balloon experiments. If one has the patience, one could try seeing if weather balloons can be sucked into the Earth at one Pole and then spewed out 20 months later at the other Pole. By tracking these balloons, one could establish with absolute certainty whether they traveled along the outside of the Earth or whether they entered the Earth. By noting the points at which they disappeared and

reappeared one could then determine exactly where these Polar Holes are. The mere fact that the low-level Chernobyl radioactive fallout was concentrated in a small area near the South Pole is, to me, highly suggestive of the existence of a South Polar Hole not far away.

We can do one better than merely guessing at the existence of Polar Holes. We can try to find them. In my research I tried to see if I could narrow down the possible location of a North Polar Hole. The Antarctic has a small population of only 3,000 people and information about it is more scant than for the Arctic . I therefore concentrated my efforts on the Arctic because the chances of success seemed higher. It is also far easier and cheaper to travel into the Arctic to find such a thing. The Arctic has been more thoroughly traveled and studied than the Antarctic. Consequently, there is more data to go on. It is also highly probably, if not a virtual certainty, that the North Polar Hole was discovered firs, and therefore one might pick up clues from Arctic exploration since the original discovery would have happened unexpectedly. Hence my interest in Crocker Land and Bradley Land and in the early, uncensored testimony of Arctic explorers.

Conclusion -

This effectively brings to a close my years of incessant research into the matter of Hollow Planets. It is now four and a half years since the issue was first raised, and I look forward to some rest from this obsession of mine. You can take a look at any map in any atlas, in any country. Look in the vicinity of Crocker Land and Bradley Land and you will find nothing by ocean. The seafloor in these regions has supposedly been mapped too. There is nothing you will find in any literature in geography to indicate the existence of land at these points, or to suggest the existence of Polar Holes anywhere.

In testing this centuries-old idea, I set out to find a hole which might lead into the Earth. There is no scientifically accepted evidence that planets are hollow. It is a taboo subject which only crackpots like myself can entertain. But what if it's true? What if Dr. Cook and Commander Peary, in their attempts to reach the North Pole, stumbled upon the outskirts of a vast land sitting up in the Arctic , near/in a Polar Hole? What if the full extent of the problem only became clear to the governments of Russia , Canada , and the USA when the Cold War started after World War II? What if, at the height of the Cold War (when military secrecy was at its greatest) it was discovered that the Earth was hollow?

What of MacMillan's conclusions that Crocker Land was a mirage? The science of optics has come a long way, and what MacMillan saw could only have been based on something else. Peary saw Crocker Land from two different angles days apart. MacMillan, Green and the others saw it at least three times through field-glasses and even with the naked-eye, close-up. Peary said it was enormous. MacMillan did too. Then we have Dr. Cook's strange photograph of Bradley Land. Amundsen's tale of the land birds flying towards Bradley Land, and Wilkins' altimeter story. Is Bradley Land real as well? And what of Capt. Keenan, and the Alaskan Eskimos and the land which lies north of Alaska? What of Sannikov Land which was also seen three times in eighty years by experienced Russian explorers?

There is no normal reason whatsoever for a government to lie about the existence of land in the Arctic . However, if that land is connected to something awesome, something amazing, which frightens our governments, then perhaps they might try to hide its existence. I believe therefore, that if there is land up there, it must, in one way or another, be connected to the existence of a hole which goes deep into the crust of the Earth. Maps are exceptionally accurate these days. Is the sea bed in the vicinity of Crocker Land and Bradley Land really as they say it is? Or is it, perhaps, that such things were concocted so that no one would suspect the existence of such a secret? The only way to know for certain is for several private expeditions to go up there and to take a good look close-up. A search must be conducted for Bradley Land and Crocker Land . If any new land is found up there in the Arctic Ocean , then we must know that indeed a hole in the Earth can't be far away.

I have made countless suggestions in this book for further experimentation in all manner of fields, including astronomy and polar exploration. I have made these suggestions seriously and I encourage those with the necessary skills to please look into this. I am making a serous suggestion hoping that someone can travel into the Arctic to engage in a serious investigation and to search for these lands which we are told do not exist.

If planets are hollow, then I feel we have a right to know. If there is something inside our world – no matter what it is - then I believe everyone should know about it. This problem of Hollow Planets can easily be solved. All it will take is a little resolve, some intelligence and a bit of hard work. Within a few short years we should be able to answer many of these questions properly. We need not sit back and wait until some government tells us this is or is not so. If they have lied before, what is to stop them from lying again? Christopher Columbus was an unreasonable man who challenged the erroneous beliefs of his time. He made many mistakes, but by his determination he found a New World . The New World he found may be as nothing compared to the Inner World which might exist right inside this Earth. Are you ready to be the next Columbus?