

TORONTO SUN NEWS FRIDAY, NOVEMBER 18, 2005

Florida honours 27 airmen who vanished off Bahamas in 1945

WASHINGTON (AP) — The disappearance of Flight 19, a U.S. Navy mission that began the myth of the Bermuda Triangle, is still unexplained but not forgotten 60 years later.

The 27 airmen who disappeared off Florida's coast on Dec. 5, 1945, were honoured in a House resolution yesterday. Rep. Clay Shaw, said he hoped the gesture would help bring closure for surviving families.

What happened is a question that has befuddled and entertained both skeptics and believers in the Bermuda Triangle, a stretch of ocean between Puerto Rico, Bermuda and Miami that some believe is an area of supernatural phenomena.

'So many weird things'

"There's just so many weird things here that experienced pilots would have not acted this way," Shaw said.

"Something happened out there."

Five U.S. Navy Avenger airplanes left the Fort Lauderdale

Naval Air Station on a routine training mission over the Bahamas. The five pilots and nine crewmen, led by instructor Lieut. Charles Taylor, were to practice bombing and low-level strafing on small coral shoals 100 km east of the naval station.

Normally 3 hours

They were then to turn north to practice mapping and then southwest to home. The entire flight, which pilots took three or four times a day, should have lasted three hours.

From radio reports overheard by ground control and other airplanes, the compasses on Taylor's plane apparently malfunctioned 90 minutes into the mission.

With no instruments to guide him over the open ocean, Taylor thought the flight had drifted off course and was actually south over the Florida Keys. As a result, he directed the planes to fly due north to hit land.

"He was not in the Keys. He was out in the end of the

Bahama chain," said David White, who at the time was a flight instructor stationed at Fort Lauderdale. "When he went north, he was going out to the wide ocean."

Just about the time the squadron was to have landed back at Fort Lauderdale, a last radio message from Taylor was received: They would keep flying "until we hit the beach or run out of gas."

Due to weakening radio signals, no reading could be made on the direct location

of the planes.

The next morning White became part of one of the largest rescue missions in U.S. naval history. Civilian vessels and units of the U.S. Coast Guard, Army and Navy scoured an area of more than 650,000 square km, but no wreckage was ever found.

Several ocean expeditions, documentaries and books offer varying theories on the disappearance, ranging from paranormal activities to sightings of alien activity.

TORONTO SUN COMMENT MONDAY, NOVEMBER 14, 2005

Travel to the stars

MIKE OLIVEIRA
The Canadian Press

Toronto for the Canadian Space Summit.

While affordable space travel is still light years away, there are other options available and a taste of space can be bought for as little as a few thousand dollars.

The growing business of space tourism was among the topics discussed over the weekend as experts met in

Three space tourists have already flown to the space station, paying up to \$20 million for the experience.

But for those without unlimited funds, the experience can be simulated for a few thousand dollars.

A Florida company is now offering 30-second zero gravity parabolic flights.

SUNDAY SUN NEWS OCTOBER 16, 2005

400 Sasquatch watchers at Texas conference

JEFFERSON, Texas (AP) — Next to a lifelike replica of a giant ape head, the believers milled about yesterday amid memorabilia proclaiming Bigfoot: Often Imitated, Never Invalidated.

While they can have a sense of humour about it, the search for the legendary Sasquatch is no joke for many of the nearly 400 people who came to discuss the latest sightings and tracking techniques at the Texas Bigfoot Conference.

There have been more than 2,550 reported Bigfoot sightings in the past century. British Columbia had the most with 362.

"It's a flesh-and-blood animal that just has not been discovered yet. And I think we're getting closer and closer," said Daryl Colyer, a Texas businessman who has investigated hundreds of reported Bigfoot sightings in Texas, Oklahoma, Arkansas and Louisiana.

Gigantopithecus

Outlandish theories about the origin of Bigfoot abound, including that it might be an extraterrestrial. Many believe the towering, ape-like creature descended from a prehistoric 3-metre-tall gorilla called a Gigantopithecus

and now inhabits North American forests.

Hoaxes have been a large part of the making of the Bigfoot legend. California construction company owner Ray Wallace donned 40-cm-long wooden feet to create tracks in mud in 1958 and it led to a front-page story in a local paper that coined the word Bigfoot.

Pictures and film footage are often disputed, such as the 1967 footage of a creature walking near a California creek.

Most evidence centres on hundreds of casts of footprints collected since the 1950s.



SUN FILE PHOTO

The above Bigfootage was filmed in 1967 in California.

Why are aliens so boring?



ROBERT FULFORD

The folklore of the 20th-century produced nothing more absurd, yet nothing more persistent, than the belief that creatures from other worlds habitually visit Earth, kidnap a few humans and then return them, apparently unhurt, to their homes. The alleged human victims later describe their experiences in what scholars of alienography call "abductee narratives." These sound like tales told by idiots, but no one who cares about the popular imagination can be entirely indifferent to them.

Abductees report that some aliens say they are bringing world peace and others announce that their mission is war. But a strikingly high percentage appear to be carrying out a peculiar assignment, raiding the reproductive systems of their victims to collect DNA. "My eggs were taken," one typical abductee reported, and another said, "sperm was sucked from my penis by a machine."

Why? Extraterrestrials must be far smarter than we are (they travel distances our scientists can barely imagine) so anyone even mildly curious will wonder what they want with a substandard planet's genetic material. That in turn suggests another question to Susan A. Clancy, a Harvard psychologist and the author of *Abducted: How People Come to Believe They Were Kidnapped by Aliens* (Harvard University Press), the latest book on this phenomenon. Having interviewed dozens of abductees, and found them likeable and honest, Clancy writes about them with compassionate but sceptical understanding. She's not like the late John Mack, a psychiatrist at the Harvard medical school, who scandalized his colleagues by deciding that abductions actually took place. Clancy believes her subjects only in the sense that she believes they think they are telling the truth.

Barney Hill's drawing of the alien that abducted him.

And she doesn't abandon her sense of humour. She asks why mentally superior aliens haven't anything better to do than hang around North America stealing our genes. "Why are these genius aliens so dñm?" she asks. "After fifty years of abducting us, why are they still taking the same bits and pieces? Don't they have freezers?"

And why are aliens so boring? They often speak to abductees but they never say anything interesting. As Clancy has noted, not one of them sounds as engaging as an average human child. They recall these dead people who speak from the spirit world through table-tappers and similar mystics. The record shows that these communicants have never uttered even one interesting sentence. Most conversations consist of "I saw your Uncle Leonard." "How is he?" "Fine, sends his best."

The reason is the same in both cases. The conversations are fictional and both abductees and spiritualists suffer from stunted imaginations. They are capable of one delirious flight of fancy, nothing more.

Clancy discovered that abductees share certain characteristics. They are not crazy, but they score high on a schizotypy test, which doesn't mean they are schizophrenic but suggests they have a weakness for fantasy and for thinking related to magic. Most of them believed in flying saucers before they were abducted.

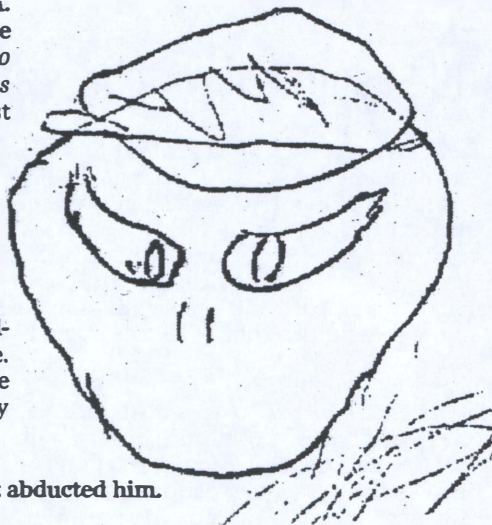
In her view the aliens are entirely human creations, expressing fairly ordinary emotional needs. Most of us don't want to be alone and many of us yearn to believe there's something bigger out there

— and that it cares about us. Also, we want to feel special. "Being abducted by aliens is a culturally shaped manifestation of a universal human need." Abductees express these feelings by believing in a convenient story that can never be proved and therefore never disproved. They also may be terrified (and thus made to feel vulnerable) by recent discoveries in genetics and reproductive technology.

Clancy devotes careful attention to the mother and father of the abductee community, a New Hampshire social worker named Betty Hill and her postal worker husband, Barney. Believing they were abducted in 1961, they began hypnotherapy a few years later. That's how Barney deeply affected American mass culture by giving credibility to the little guys with big heads and wraparound eyes who have since appeared in everything from *Close Encounters of the Third Kind* to *The X-Files*.

Asked under hypnosis to draw an alien, Barney came up with a sketch that launched a thousand myths. In fact, he was reproducing a face he had seen 12 days earlier on a TV show, *The Outer Limits*. But by the time anyone figured that out the aliens Clancy calls "macrocephalic space-waifs" had become permanently lodged in mass culture. As Clancy says, "Betty and Barney Hill got their ideas from books, movies and TV. From then on, people got their ideas from books, movies, TV, and Betty and Barney Hill."

National Post
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THE EPOCH TIMES ♦
OCTOBER 13 - 19, 2005

Egypt Prepares New Probe of Mystery Pyramid Shafts

CAIRO (Reuters) - Egypt will send a robot up narrow shafts in the Great Pyramid to try to solve one of the mysteries of the 4,500-year-old pharaonic mausoleum, Egypt's top archaeologist said on Monday. Zahi Hawass told Reuters he would this week inspect a robot designed to climb the two narrow shafts which might lead to an undiscovered burial chamber in the pyramid of Cheops at Giza, on the outskirts of Cairo.

Speaking at UFO conference

EYE SEPTEMBER 29/05

EXPOSING THE REAL X-FILES

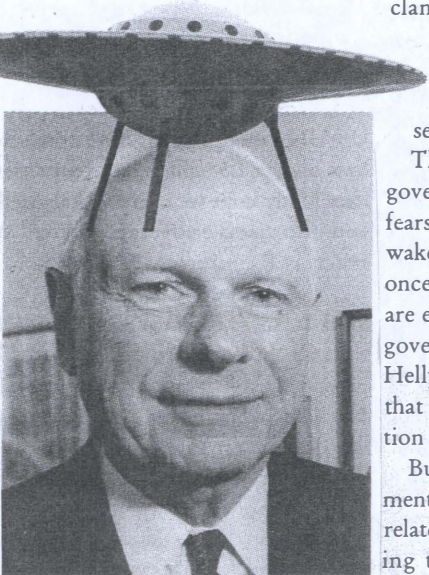
UOFT — Outside Convocation Hall, a predominantly white, middle-aged group of about 20 discuss their personal encounters with UFOs. Retired electronic engineer John Ford says he saw his first flying saucer in 1963, while picnicking in the Zimbabwe bush with his wife and their friends. Catherine Monserie, on the other hand, has seen alien crafts outside Paris in 1967 and over the Toronto Islands in 1995.

It is no surprise that audience members at the university's UFO Disclosure and Planetary Directions Symposium are ET believers — you'd have to be to spend \$40 for seven hours of conspiracy theory. What is surprising is that most of the convention's audience, as well as its featured speakers (who include a political activist, a nuclear physicist and former minister of defence and former Deputy Prime Minister Paul Hellyer) are not your central-casting idea of conspiracy theorists. As nuclear physicist Stanton T. Friedman says, his speech could have been called, "What's a Nice Guy Like You Doing in a Place Like This?"

Friedman is here to address what he refers to as a "Cosmic Watergate" and "the biggest story of the past millennium": Western governments' secrecy regarding extraterrestrial life. Friedman, who began studying UFOs in 1958 after ordering a text on the subject to avoid paying shipping fees on a load of books, is considered the "original civilian investigator" of Roswell, New Mexico's famous 1947 UFO crash site.

Pursuant to 1966's Freedom of Information Act in the US, Friedman requested the CIA's UFO files. This appeal, which should have taken 10 working days to process, took five years, leading him to assume, "These guys must work five minutes a day." When the documents did arrive, the majority of their content was blacked out.

Clearly, the government is keeping secrets. Author Richard Dolan says



Paul Hellyer is now a UFO believer.

Calculating odds of life in galaxy

By Stephen Juan

WHAT IS THE PROBABILITY OF HUMAN LIFE EXISTING ON OTHER PLANETS?

(Asked by Warren Reed, age 12, of Toronto)

Who knows? We can only guess. In 1961, U.S. astronomer Frank Drake proposed an equation for calculating the number of technologically advanced civilizations existing in our galaxy. The Drake equation can be expressed as: $N = R \times fp \times ne \times fl \times fi \times fc \times L$.

■ "N" is the number of civilizations in the galaxy that have developed to the point of being able to communicate.

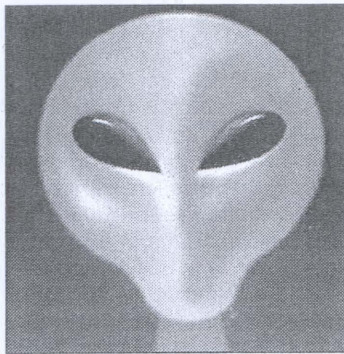
■ "R" is the rate at which suitable stars are formed with the capability of forming planets such as ours.

■ "fp" is the proportion of stars with planets.

■ "ne" is the number of planets around any star with a temperature range that would be habitable by humans.

■ "fl" is the proportion of planets on which life has evolved.

■ "fi" is the proportion of planets that has reached the stage of human intelligence.



■ "fc" is the proportion of planets that have developed a communications technology similar to our own.

■ "L" is the length of time for which an intelligent civilization can hope to survive either accidental destruction by outside forces or self-destruction by misuse of its own technology.

Taking Mr. Drake's equation, a group of scientists called the Search for Extra-Terrestrial Intelligence (SETI) estimate the rate of star formation at about 20 per year. SETI suggest that half of all stars will form planetary systems, that the number of planets within one system that could support life is one, and that life will appear and evolve on one in five such planets. Mindful that dol-

phins and whales are intelligent but have never developed technology, SETI also suggests that technology might be expected to appear in half the other worlds that support life. So putting these numbers into Drake's equation: $N = 20 \times 0.5 \times 1 \times 0.2 \times 0.5 \times L$. The number of civilizations in the galaxy is equal to the number of years (L) that an advanced technological civilization can hope to endure. Of course, the only such civilization we have to go on is our own. It has only been technologically advanced for some 50 years or so. Thus, the number of advanced life forms in our galaxy is at least 50. But there are obviously many, many assumptions built into this.

SATURDAY SUN NEWS NOVEMBER 5, 2005

Robot rescues bird

SYDNEY, Australia — A robot designed to disarm bombs yesterday rescued Tweety, a pet cockatiel, whose owner had to flee her apartment building because of a nearby tunnel collapse.

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clandestine UFO research is funded by the "black budget" — secret money collected from classified federal taxes, drug trafficking and securities fraud.

There are many explanations for governments' secrecy. Some allude to fears of a Wellesian public panic in the wake of disclosure and Dolan says that once you acknowledge a problem, you are expected to take action, which the government is unprepared to do. Paul Hellyer reinforces this point by saying that he was "too busy" to pay attention to the UFO issue while in office.

But the speakers agree that governments must reveal any existing UFO-related problems and set about solving them immediately. Stephen G. Bassett, director of Paradigm Research Group, says alien abduction is his biggest concern in the world today. To

put this comment in perspective, Bassett cites overpopulation as the second most pressing matter. During a question and answer session, a female audience member worries about the treatment of the human-alien hybrids that allegedly result from abductions.

Still, not everyone views abduction as a major threat. Paul Hellyer says he is unaware of anyone dying at the hands of extraterrestrials. Instead, Hellyer sees anti-alien weapons as a bigger danger. The politician believes that the nuclear missiles constructed under Ronald Reagan's Star Wars initiative were actually conceived to defend us against unfriendly interplanetary visitors. Bassett echoes the futility of such attempts: "All they have to do is drop meteors on us and we're in the Stone Age."

JAMES SIMONS

INTELLIGENT LIFE? NO SIGN OF IT HERE

MEET THE PARANORMALISTS

BY JOSEPH BREAN
in London

Brenda the paranormalist is slurringly drunk, swinging a glass of white wine. She's got three-fifths of her teeth, curly brown hair, and she's smoking at the bar in the Sols Arms pub in West London. She has come for the monthly Forum for the Study of Crop Circles and Other Mysteries.

She says the slideshow on "the Mayan link" that just finished upstairs was "rubbish," and that she has a presentation on the paranormal that will astound a non-believer.

"I'm going to serve organic salad," she says, her mumbled words just barely decipherable, as if from an alien intelligence.

Aliens are a hot topic in England these days, and not just among barflies. Reports of UFOs are spiking here, just as they are across the globe, thanks (probably) to the annual Taurid meteor shower. At the normally level-headed London Science Museum, a new blockbuster exhibit wonders, "When will they return our calls?" and, in response, the world's leading alien-message theorist sneers that "All we do is listen."

In the midst of this, though, it is easy to forget that the real action in the search for aliens often happens at the grassroots.

Peter Doye, for example, has held high positions in several British crop-circle and paranormal groups. As a young pilot in the air force, he says, he was "scrambled" to track a UFO that flew at impossible speeds. Now, in his retirement he is a particular authority on dowsing, also called water-divining, and he always carries a little pendulum, which he dangles from his hand.

"Clockwise means yes and counter-clockwise means no," he says. "For most people."

He has a certain stature at this Forum. One woman comes up to him to say: "I had a communication. Not a lot, but one in particular." Another brings him news of a young man in Scotland who has

invented "a machine that makes energy from water or something." But let him call you, she says. It's long-distance and "he could talk the hind leg off a donkey."

Waiting alongside Mr. Doye for over an hour while someone goes to find a working slide projector, it becomes clear that if anyone ever makes contact with aliens, it is not going to be these people. There are perhaps 30 of them, gathered in the upstairs bar for a lecture by Lucy Pringle, the queen bee of British crop-circle studies.

One-half looks peaceful and happy, and from snippets of overheard conversation their imaginations seem unburdened by wide scientific knowledge. There is the air of a cult among them, like the Teletubbies.

Many are wearing crystals and drinking wine.

The other half, including the sweaty men with their shirts hanging open and the two others in black hats and sunglasses, seem intelligent but paranoid. They drink coffee. One man is reading *Deeper Insight Into the Illuminati Formula*.

Ms. Pringle is getting impatient about the projector, but remains dignified. She is dressed in baggy orange pants and a green sweatshirt with frilly white cuffs and collar. Her hair is styled, and she reeks of composure.

The line she is peddling is not explicitly otherworldly. She says crop circles might be man-made, but if they are, then the men who made them were guided by some unexplained force. Crop circles are too mathematically complex to be the work of a simple "land artist," she said.

In the case of one famous British circle from 2004, she said it encodes the complete Mayan calendar (but only under some very tenuous assumptions, supported with unsourced information from the Internet and what appear to be Ms. Pringle's holiday photos from Central America).

It seems unlikely she is correct, but her thinking is in keeping with the more serious approaches to galactic communication.

Doug Vakoch is director of Interstellar Message Composition

at the SETI Institute, which searches for alien intelligence. He believes that when humans send out messages to aliens, they should start with the facts of science, such as the calendar. One of his draft messages, for example, is the periodic table.

"There's a regularity to nature that scientists on any world will know about," he says in a phone interview from California. To him, the Science Museum's question — "When will they return our calls?" — is either naively optimistic or just plain ignorant. We have hardly made any.

Certainly, there are exceptions, notably the 1974 Arecibo radio transmission, which encoded such things as the numbers one to 10 and the figure of a human. The burned-out Pioneer and Voyager spacecrafts carry illustrated plaques, in case they are one day salvaged by aliens.

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But Mr. Vakoch thinks SETI's problem, so far, is that it has only been listening to interstellar static, not broadcasting messages. Aside from a few exciting moments, such as three years ago when they mistakenly tracked a signal from a U.S. satellite, this search has been fruitless.

"We know too little about their [aliens'] motivations, if they are out there, that it seems unwise to assume the other civilizations are going to take on the burden of communication," he said.

But what if they did? And what if they reached someone like Lucy Pringle?

She is serious when she imagines the possibilities. "I think we have to deal with them on a personal level," she said.

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NATIONAL POST, MONDAY, NOVEMBER 7, 2005

NATIONAL POST, WEDNESDAY, NOVEMBER 2, 2005

PLUTO PHOTOS SHOW THREE MOONS

Washington Pluto, the smallest and most distant planet of the solar system, may have three moons instead of just one, according to images taken by the Hubble Space Telescope. Astronomers from the Southwest Research Institute reported observing the moons in May as they described near circular orbits around the icy planet in three days, the National Aeronautics and Space Administration said yesterday. If the discovery is confirmed by the International Astronomical Union, the two new moons will be named after characters in Greek and Roman mythology and take their side along Charon, Pluto's moon discovered in 1978. For the time being, the two tiny satellites have been named S/2005 P1 and S/2005 P2. They have eluded detection so long

because they are 5,000 times dimmer than Pluto. The two moons-in-waiting were observed to be approximately 44,000 kilometres and 53,000 kilometres away from Pluto — two or three times as far from the planet as Charon. Compared to Charon's 1,200-kilometre diameter, the two new moons are pint-sized: just 32 kilometres and 70 kilometres across, respectively. Pluto was discovered in 1930 at a distance of some 6.4 billion kilometres from the sun in the heart of the Kuiper Belt — a zone beyond Neptune 4.5-7.5 billion kilometres from the sun. The Kuiper Belt is estimated to include more than 35,000 objects of more than 100 kilometres in diameter: the remnants of the sun's accretion ring from which all the planets were formed. *Agence France-Presse*

2085

CONTACT DAY

Will ET be phoning us in Lizzie's century? 'Absolutely.'

M 100 LIZZIE'S CENTURY | BY ALLEN ABEL

The voice called out from Mars and took itself through the places where there was no sunrise or sunset, but always the night with a sun in the middle of the blackness. And somewhere between Mars and Earth everything of the message was lost, perhaps in a sweep of electrical gravity rushing by on the floodtides of a meteor, or interfered with by a rain of silver meteors. In any event, the small words and the unimportant words of the message were washed away. And his voice came through saying only one word:

"... love..."

—RAY BRADBURY,

THE MARTIAN CHRONICLES, 1946



"WHAT WILL BE the one news event that Elizabeth always will remember?" I asked my futurists and fatalists, and they said, "When the first robot graduates from Harvard," or "The first cloned human who runs for Parliament."

But no one said, "The day we learn that there are others like us in the universe."

By 2085, I am just a hologram, an addled avatar telling the same old tales of watching the Brooklyn Dodgers play at Ebbets Field in 1957, and what a lovely town Toronto was, before Lake Ontario dried up in the 2060s.

(Wisely, just before I was uploaded, I programmed one of our household robots to delete my stories from its memory as soon as it heard them, and then to beg to hear them again.)

But Elizabeth, at this point, is only 80—brown-haired, green-eyed, fashionable and fit, still working, loving and helping others. If she still possesses any of the things her father left her, I hope that it is the sense of wonder that I felt so deeply when I was a boy with my first telescope, probing the immemorial mysteries that all humans once shared, before the city lights and the smoke of progress took away our starry, starry nights.

As the 21st century began, many men and women of my generation retained their Space Age wanderlust, and those who didn't have a spare \$20 million for a ride on a Russian rocket channelled it into a rigorous and patient hunt for a sign of life on another

world. It was called SETI—the Search for Extraterrestrial Intelligence—and one of its founding visionaries was a blind man.

From the Frequently Asked Questions section of the SETI Web page:

Question: Do you have any pictures of UFOs or aliens?

Answer: No.

IN 2005, SETI had three radio telescopes designed to be attuned to the infinite sky (out of a hoped-for 350), and more than five million personal and office computers around the world were using free SETI software in the form of a screen saver to search for ET. Every possible frequency from every possible direction was methodically combed for a rhythmic pulsation that could not be dismissed as anything but a television, radio, or Rogers Wireless transmission from the little green women on the Planet Zork.

And the sightless dreamer, Dr. Kent Cullers—the first totally blind person ever to earn a Ph.D. in physics—was living in Christchurch, New Zealand, a country that was, as his wife liked to say, the home planet of "wonderful people, and not that many of them."

I asked Cullers whether he expected to confirm the existence of an advanced extraterrestrial civilization during my daughter's century (or more) on Earth, and he said, without hesitation:

"Absolutely! In 50 years, we will have searched the galaxy, not only with light and X-rays, but even for gravity waves that will reveal super-civilizations that can control their own stars."

"Are you discouraged that you haven't found it yet?" I asked.

"The universe is vast, and our search is not big enough yet," Cullers replied. "Today, it's the near stars. Tomorrow, the galaxy. That's the whole point of physics, to extend your senses into the great beyond. Most of the people in SETI have some sort of philosophical belief. To me, knowing what the universe *is* is vastly important. I'm blind, as you may know, and I'm using my computational powers to look into the universe."

Cullers was proud of the fact that five million amateurs had joined their hard drives to his quest.

"Still, that's a lot fewer than were search-

ing for the Paris Hilton sex tape," I noted.

And the truth was, more earthlings were wrapped up in the *X-Files* and Roswell fantasies and Area 51 than were doing the serious science that would be needed to find aliens if ET did anything short of landing on the White House lawn.

Some folks think that in 1947 alien rocket jockeys made a last-minute navigation error and crashed in the desert. The putative victims are generally portrayed as humanoid, if somewhat shorter than us, and with bigger heads—like children. While not impossible, this is unlikely. The fact that we have two eyes is good engineering, but having four appendages is an evolutionary accident. Most earthlings have six (they're called insects). The Roswell aliens resemble us because we relate better to anthropomorphic creatures. Real aliens won't be so similar. They probably won't crash, either.

—SETH SHOSTAK, CHIEF SETI ASTRONOMER, IN *THE GUARDIAN*, 2005

"WHAT WILL happen on the day you get the signal?" I asked Kent Cullers.

"Our promise is that all of us will announce the truth, fully and early," he said. "We will say, 'We have discovered something that just might be a sign of extraterrestrial intelligence. It is not an error. It is not a problem with our equipment. It is real.' So, then we know it is real, and we keep listening, and we start to understand the sig-



Teenagers necking in the woods accidentally spark intergalactic mayhem when they run over a visitor with their car, prompting the *Invasion of the Saucer Men*, 1957.

Continued on page 6

nal. But even if they send us the equivalent of the Rosetta Stone, it will take a long, long time."

"When it happens," I asked, "is it The Day the Earth Stood Still? Does my daughter's life change instantly and utterly?"

"No," said Cullers. "Life goes on, because the information won't be invasive, in the way that an attack on Earth would get your attention.

"What I will want to see is if ET gives us little keys that might make our lives better, cure all diseases, something like that. If you find out a small mathematical trick that can be deciphered from the signal, even a small intellectual thing that we never heard of before—like 'We know a way to rejig your DNA to increase the human lifespan by a factor of two—are you interested?' That could change the world for you."

"Wouldn't you prefer that the resources of science be used not to hunt for ET, but to cure blindness?" I said. "That would change the world for you."

"But I don't think it can be done," Cullers answered.

"You can set all the resources you want on a problem, but that doesn't mean you can solve it. A better example is cancer, or extending the human lifespan by a factor of two. I don't know how to cure blindness, but I do know how to use my intelligence to look into the stars."

"Isn't the proper goal of science the end of affliction?" I asked.

"The most altruistic and safest goal of science is for the human good. But a large number of scientists believe that the purpose of science is to satisfy curiosity, that the need for knowledge is in itself a good thing.

"Perhaps I'm prejudiced, but I find the promise of interstellar intelligence to be more surprising than anything I might see if I had vision. I've got lots of other senses I can use to intuit what our world is like. Whatever we learn from another technological civilization will be infinitely more interesting than anything we can extrapolate from our experiences here on Earth."

By 2085, of course—give or take a half-century—the Singularity Machine would have joined the search, if it had been programmed to wonder about the cosmos beyond its own mainframe, and if it chose to share with humans the knowledge that it gained from the organisms—or fellow machines—that it contacted. Cullers might not still be alive, but his hologram would rejoice at the news.

"As computers become more and more intelligent," he said, "they will design themselves, and technology will advance so fast that we can't guess what will happen next. We will be a different intelligence—'bio-beings.' It is quite possible that bio-intelli-



Steven Spielberg depicts space invaders as benign beings in *Close Encounters of the Third Kind*, 1977.

gence and computer intelligence will be complementary. Information will be sent back and forth between silicon intelligences, and when the information is useful to humans, the computers will pass it on to us."

"Why are you so certain that the computers will tell us everything they find out?" I asked.

"Because we don't want the same things

'Why are you so certain that the computers will tell us everything they find out?'

that computers want. We, the bio-beings, provide a nice substrate to help them advance. I don't think they'll want to get rid of us. But if we don't build an interest in the universe into our computers, they won't find information that's interesting to us."

In the midst of this discussion, I realized that I was speaking through a cordless handset to a man across the Pacific Ocean whom I had never met, and how, to my grandfather as a boy in Bialystok, Poland, this would have been a miracle beyond his comprehension or dreams. It was not quite Ted Sargent's *Death of Distance*—I could not see Kent Cullers, and he could not touch my hand—but we were sharing our thoughts, and our hopes and our understanding, and that was not too bad for a mid-size planet in orbit around an unexceptional sun.

So we climbed deeper and deeper into the fantasy of *First Contact*.

"Let us say we made contact with a civilization 250 light years away, so that it took 500 years to get a response," Cullers said. "Five hundred years is about the time span that separates us from Columbus. If Columbus had the chance to ask a question of a

more technologically advanced civilization, he probably would have asked for the secret to making better sailing ships. But by the time the answer came back, we had jet airplanes. So we'd better get the question right the first time."

"We should ask them, 'What is the worst thing that ever happened on your planet, and how did you survive it?'" I volunteered.

But then I wondered, "What if their next message is, 'Our warships are on their way?'"

"If we should have been silent," said the blind man, "it's too late."

Question: Has the SETI Institute found an extraterrestrial signal yet?

Answer: No SETI search has yet received a confirmed extraterrestrial signal. If we had, you would know about it. . . . In the past, there were several unexplained and intriguing signals detected in SETI experiments. Perhaps the most famous of these was the "Wow" signal picked up at the Ohio State Radio Observatory in 1977. However, none of these signals was ever detected again, and for scientists that's not good enough to claim success and boogie off to Stockholm to collect a Nobel Prize.



Über-capitalist Quark, from *Star Trek, Deep Space Nine* (1993-1999), is really a nice Ferengi underneath that prominent brow.

"WHAT COULD we learn from them?" pondered my friend Don Page, the most celestial man I know. "I mean, okay, so we got a signal—now we know they're out there—and nothing more. If we were expecting to hear it, then it just confirms our expectations. If we weren't, then psychologically it

After we ask our question, what if their next message is, 'Our warships are on their way'?

MACLEAN'S | OCTOBER 10, 2005

to a question does not necessarily mean that there is an answer to be found. But unlike Elizabeth's generation, he never had the Singularity Machine listening to every channel at once.

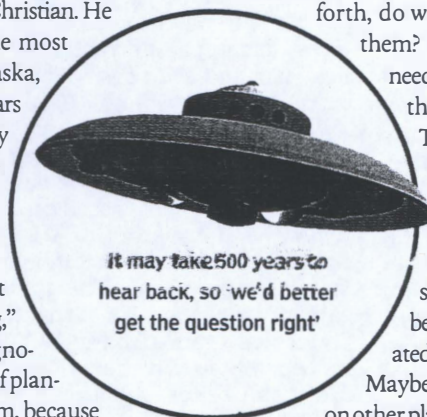
"All right, then," said Page. "Suppose we imagine that they are emitting energy the same way we do—radio, TV and things like that. It is likely that they themselves are quite *different* from us, but we know that probably would have a big effect: 'We are not alone,' and that sort of thing. But it would teach us one important fact about biology—namely, that evolution up to the technological level is a probable outcome."

Page is an astrophysicist at the University of Alberta in Edmonton, a frequent collaborator with Stephen Hawking, the father of five, including two Haitian adoptees, and a

practising evangelical Christian. He grew up in some of the most isolated hamlets of Alaska, where there are eight stars on the state flag—Baby Lizzie's favorite constellation, the Big Dipper—and a trillion more in the sky.

"I'm skeptical that SETI will find anything," Page said. "We're so ignorant of the percentage of planets that have life on them, because we are the only planet that we know of that does. We don't even know the probability that any given star has a solar system, so perhaps we could guess that it is one out of 10. Even then, I think it is somewhat unlikely that there is another advanced civilization in our galaxy of 100 billion stars."

As Cullers admitted, committing resources



electromagnetism is the same throughout the universe, so let's assume that they have TV. So we receive TV images and we can project them and see things and they can see ours. At first, they don't know what our language is, but they can figure that out from the emotions and actions they see expressed when they hear the words.

"If we could communicate, go back and forth, do we send missionaries to them? If they have fallen and need redemption from sin, then maybe we should. The Bible says that human beings were created in the image of God. But it is just one interpretation to say that we are the *only* beings in the universe created in the image of God. Maybe there are other beings on other planets who are also in the image of God. I would not see a theological problem with it. The Bible was written for humans, and humans live on Earth . . ."

But now we were talking about religion, and religion assumes that we still need a God or gods at all. To answer that Frequently Asked Question, we'll have to turn the page another 10 years. M

NATIONAL POST, MONDAY, NOVEMBER 14, 2005

American inventor patents space-time bending spaceship

Skeptics say inventor's science is full of holes

BY TOM SPEARS

The U.S. government has granted a patent on a futuristic spaceship designed to approach light speed and escape gravity — by bending space, time and probably the laws of physics.

This means you can't build a ship able to do these things unless you get permission from Boris Volfson, of Huntington, Ind. This is his own invention, along with a new type of pinking shears.

Mr. Volfson quotes H.G. Wells in citing reasons why the space-bending gizmo will work, and also sounds a whole lot like *Star Trek*. His interstellar spaceship will have flux modulators, a superconductive shield around it

that bends space-time, and a "space-time curvature anomaly" that escapes gravity and pushes the ship so fast it can carry a crew to distant stars.

Also, apparently, an engine that runs nearly at light speed.

And this, some now claim in the journal *Nature*, means the U.S. Patent Office should have turned down the application. Patents are meant only for things that might actually work.

Mr. Volfson's documentation — for patent no. 6,960,975 — shows the reader with references to physics papers and Web sites by dozens of authors, and touches on relativity, string theory, extra dimensions and tiny loops within space. It describes a ship that will surround itself with an "egg-shaped" envelope in which space and time curve the way the ship directs them, and letting the ship go incredibly fast.

This is part of the patent.

So, are we one step closer to reaching the stars?

Sadly, no, says Stuart Shapiro, a physicist at the University of Illinois at Champagne-Urbana.

"The inventor is vaguely conversant with a number of issues [words, really] in cosmology and relativity, but I am not at all convinced they are understood or combined in a meaningful, let alone practical, way," he says in a short analysis.

"There are certainly mistaken ideas.... Nor is it at all clear to me, for example, how in principle one significantly modifies global cosmological parameters, like the cosmological constant or space-time curvature, by some local piece of equipment, however cleverly it is designed. There is not sufficient mass-energy to effect such changes."

Many physicists have said one can bend space-time, but one would need to fly in something

far more massive than Earth, or nearly as fast as light, to make a big change.

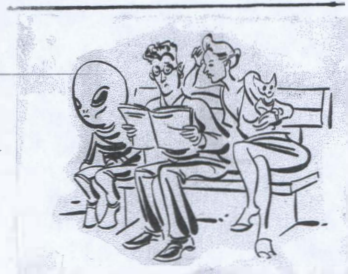
Dr. Shapiro remains "doubtful" about the starship.

It's Mr. Volfson's most ambitious invention, but not his first. He has also patented a "rotary trimmer with switchable blades" to cut fabric or cardboard edges that are "straight, patterned, scalloped, pinking, wave, perforating or zigzag."

He also invented imitation stained glass made of "electroluminescent phosphors arranged in a predetermined decorative pattern, a pair of electroconductive walls trapping these electroluminescent phosphors and a plurality of lead-simulating strips" at the edges.

You plug it in and it glows in pretty colours.

CanWest News Service



Insight into alien abduction

BENEDICT CAREY
NEW YORK TIMES

People who have memories of being abducted by aliens hold their ground amid snickers from a public that thinks they are daft or psychotic.

They are neither, says Harvard psychologist Susan Clancy, and their experiences should be taken as seriously as any strongly held exotic beliefs. In her book, *Abducted*, due in October, Clancy, who interviewed dozens of self-described abductees as part of a series of memory studies, provides a discussion of current research into memory, emotion and culture that renders abduction stories understandable, if not believable.

Her work also hints at a larger ambition: to explain the psychology of transformative experiences, whether supposed abductions, conversions or divine visitations.

"Understanding why people believe weird things is important for anyone who wishes to know more about people — that is, humans in general," she writes.

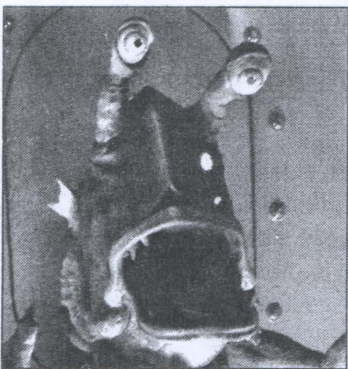
Clancy's accounting for abduction memories starts with an odd but not uncommon experience called sleep paralysis. While in light dream-rich REM sleep, people may wake up for a few moments and find themselves unable to move. Psychologists estimate about a fifth of all people will have that experience at least once, during which

some 5 per cent will be bathed in terrifying sensations like buzzing, full-body electrical quivers and a feeling of levitation, at times accompanied by hallucinations of intruders.

Although no one has studied this group systematically, Clancy suggests, based on her interviews, that they tend to be people who already have some interest in the paranormal, mystical arts and the possibility of extraterrestrial visitors.

Where do the green aliens with wraparound eyes come from? From the deep well of pop culture, Clancy argues, based on a review of the history of UFO sightings, movies and television programs on aliens. The first "abduction" in the United States was dramatized in 1953, in the movie *Invaders From Mars*, she writes, and a rash of abduction reports followed this and other works on aliens.

Abduction narratives often have another dimension that Clancy suspects may be central to their power: they give people a way to comprehend the many dispiriting things that buffet any life, and a deep sense that they are not alone in the universe.



The most monstrous aspect of alien abductions may be how people's stories are dismissed.

to find you will use thermal imaging based on the roughly 91-degree temperature of human skin, so smearing yourself in cooling mud will confuse them. If being chased by an unmanned robot vehicle, flee to a rustic, unmapped area with lots of obstacles. If your robot 'smart' house — one wired with video surveillance and computer gear — tries to trap you, chop your way out with an axe and don't take your cell-phone, because the house will track you with it."

Source: *The Pittsburgh Post-Gazette*

THE GLOBE AND MAIL
TUESDAY, NOVEMBER 8, 2005

When robots attack

"Any robot could rebel... so it is crucial to learn the strengths and weaknesses of every robot enemy," writes Dr. Daniel Wilson

in *How to Survive a Robot Uprising*. Although the roboticist's handbook is humorous, it contains some real tips: "A robot trying



supernovas

The Universe

TERENCE DICKINSON

Amateur astronomers have made some remarkable discoveries by scanning the night sky with telescopes. Perhaps the most amazing of these is the discovery last month of a supernova, an exploding star, in outer fringes of the obscure galaxy NGC1559 in the constellation Reticulum.

Spotted by Robert Evans, a backyard astronomer in Hazelbrook, New South Wales, about 100 kilometres west of Sydney, Australia, the find is astonishing because it is Evans's 40th discovery of a supernova in a distant galaxy using only his eyes and his telescope. No computers. No automated equipment. No digital imaging devices.

Evans uses a 300 mm-diameter Newtonian reflector telescope, typical of the equipment utilized by thousands of amateur astronomers worldwide. But no one has come close to matching his achievement — and never will. Automated ro-

botic research telescopes with digital imagers are now regularly sweeping for supernovas and will soon make almost all the discoveries. Evans started his searching in 1981, more than a decade before the first astro-robots were even being tested.

Evans has an advantage at the telescope that none of his human competitors have been able to match: his prodigious memory for star fields. He has committed to memory the appearance of more than 1,000 galaxies and their starry environs down to magnitude 15, which means he can check each galaxy field of view in his telescope just by eye.

Moving across the sky at the rate of one galaxy every two or three minutes, Evans can scan 100 or more galaxies for supernovas in one night. No one has been able to approach this feat, nor will there be any need once the robotic search telescopes are perfected, which they should be by 2012.

Later this century, astronomers will remember Evans as an extinct species: a human computer who applied his remarkable talent to scientific research.

EYE AUGUST 11/05

Space is so the place

Never mind that research done to prepare for space travel helped come up with lighter materials that could be used in wheelchairs and other types of plastic/metal products. Never mind the benefits of medical research sponsored by NASA that could result in medications to help the aged in the future if the research continues. Never mind that we were almost waylaid by an asteroid years ago — an event that would, and should, make most of the G8 nations get off their collective asses and stop focusing on just the mudball we live on. Never mind all of that, because "space is not the place."

Here's a quote from Robert Heinlein that sums up what I think:

"The most ironical thing about our space program is that there are thousands of people alive today who would be dead were it not for some item derived from space research — but are blissfully unaware of the fact — and complain about 'wasting all that money on stupid, useless space stunts when we have so many really important problems to solve right here on Earth.' That sort of thinking would have kept Columbus at home."

At least he knows what he's talking about. **NEVILLE A. ROSS**

metro

WEDNESDAY, NOVEMBER 9, 2005

■ **UFO FLAP** Numerous sightings of massive fireballs in the skies over Germany this week have led to an upsurge in reports of UFOs, but scientists believe the cause could be a bizarre annual meteor blitz.

SOURCE: REUTERS

■ **NASA'S WEBSITE** says such fireballs have been reported elsewhere in the world and may also be due to the fact that the Earth is now orbiting through a swarm of space debris.

SOURCE: REUTERS

Lost City of Stars Discovered

By DAVID JAMES
The Epoch Times Sydney Staff

A team of Australian and U.S. astronomers have discovered that nearby galaxy NGC 300 has a large extended disk populated with ancient stars, extending the known diameter of the galaxy by at least 200 percent. The discovery was the result of a detailed study of the galaxy using the 8-yard Gemini South telescope located at Cerro Pachón in central Chile.

It is believed that initially, the outer disk of stars was as bright as the galaxy's center, but over time the stars at the outside of NGC 300 faded to the point of becoming almost imperceptible.

"A few billion years ago the outskirts of NGC 300 were brightly lit suburbs that would have shown up as clearly as its inner metropolis," said Professor Joss Bland-Hawthorn of the Anglo-Australian Observatory in Sydney. "But the suburbs have dimmed with time, and are now inhabited only by faint, old stars—stars that need large tele-

scopes such as Gemini South to detect them."

NGC 300 is a spiral member of the extragalactic cluster known as the "Sculptor" group of galaxies, which is our closest such cluster at approximately 6.1 million light-years away. Most of its stars lie in a fairly flat disk making it appear to be a normal spiral galaxy like our Milky Way. NGC 300 is the first galaxy outside of our local group to be studied in such depth.

Professor Bland-Hawthorn believes that the finding has profound implications for our own galaxy, since most current estimates put the diameter of the Milky Way at about 100,000 light-years or about the size now estimated for NGC 300. "However, our galaxy is much more massive and brighter than NGC 300, so on this basis our Galaxy is also probably much larger than we previously thought—perhaps as much as 200,000 light-years across," said Bland-Hawthorn.

The discovery was published in the August 10, 2005 issue of the *Astrophysical Journal*.

THE EPOCH TIMES •
OCTOBER 3 - 10, 2005

Pluto May Have Three Moons, Instead of One

WASHINGTON (Reuters) - Pluto, that cosmic oddball at the far reaches of our solar system, may have three moons instead of one, scientists announced on Monday. Astronomers using the Hubble Space Telescope glimpsed the two new satellites back in May, and were intrigued when the pair of possible moons appeared to move around Pluto over three days in what looked like a nearly circular orbit.

Earth twins

The Universe

TERENCE DICKINSON

Ten years ago, the first planet was discovered orbiting a star other than the sun. As of last week, astronomers had found a total of 161 planets orbiting 138 different stars. Most of these stars have one known planet, but 10 have two planets, three have three planets and one has four planetary companions.

Most of these extrasolar planets, as they are called by astronomers, are roughly the size of Jupiter and Saturn, the two largest planets in our own solar system.

The smallest one detected so far is a planet eight times Earth's mass, orbiting the red dwarf star Gliese 876. Although nothing about its composition is yet known, such a world is halfway between a rocky Earth and a gaseous planet like Neptune.

"We are in new territory here," says leading planet hunter Geoff Marcy, an astronomer at San Francisco State University. "The next generation of astronomers will be discovering other Earths out there."

But Marcy says it won't be easy because most of the planetary systems discovered so far have their planets in highly eccentric (steeply oval) orbits which means that any Earth-sized planets that might have initially existed would have long ago been either gravitationally kicked out of the system, or

forced into orbits unsuited to Earth-like conditions.

Unlike the extrasolar planetary systems discovered so far, the planets in our solar system have nearly circular orbits, a condition that makes it possible for Earth and the other smaller planets to exist in safe, stable orbits closer to the sun.

"Therefore," Marcy says, "the surest way to find a planet like Earth is to first find a solar system with a Jupiter like ours."

So far, such a solar system has not turned up and the trend seems to be pointing the other way, towards increasingly eccentric orbits for Jupiter-sized planets that are farther from their host stars.

"We will know in the next five years whether our type of solar system is common or not," says Marcy.

The nearest known planet of another star is a Jupiter-sized one orbiting Epsilon Eridani, the second nearest sun-like star, 10.5 light-years away.

The planet has a seven-year orbit around Epsilon Eridani compared to Jupiter's 12-year orbital trek around our sun.

Theoretically, there is room for an Earth-like planet closer in to Epsilon Eridani.

However, the Jupiter-sized planet has a highly eccentric orbit which brings the big planet in closer than Mars is in our solar system.

Experts say the gravitational disturbance from these close-in swings would not allow a stable orbit for an Earth-like world.

Robbie Williams:

I can't wait to see aliens

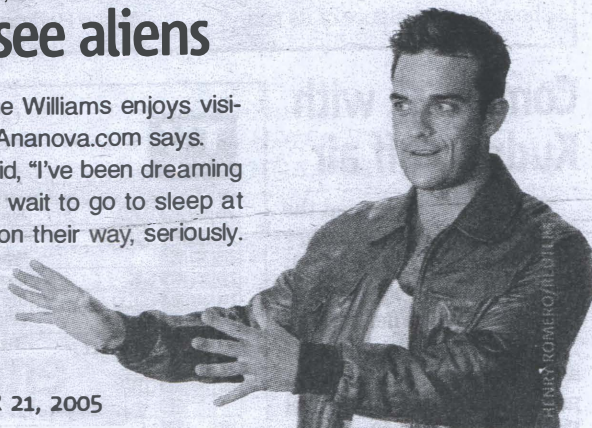
British superstar singer Robbie Williams enjoys visitors of the extra-terrestrial kind, Ananova.com says.

On a recent radio show, he said, "I've been dreaming every night about UFOs, I can't wait to go to sleep at night. I think they are definitely on their way, seriously.

Mark my words. From now until 2012 — watch out kids."

METRO TORONTO NEWS SERVICES

metro
WEDNESDAY, SEPTEMBER 21, 2005



Posited theory on moon's formation

ALASTAIR G.W. CAMERON

Scientist measured radiation to pierce Venus' cloudy veil

Cornell H. Mayer, a pioneer in radio astronomy who found the first signs of searingly hot temperatures on the surface of Venus, died on Nov. 19 at his home in Alexandria, Va. He was 83.

The cause of death was congestive heart failure, said his wife, Carey Whitehead Mayer.

After advances in radar during the Second World War, sci-

**'THAT WAS A BIG
DISCOVERY ... THAT
WAS BEFORE WE HAD
PLANETARY PROBES'**

entists started building large metal dishes in the 1950s to listen to the universe. Mayer used a 50-foot radio telescope on top of a building at the Naval Research Laboratory in Washington and pointed it at Earth's neighbouring planets.

Astronomers knew little about Venus, which is enshrouded in thick clouds, but they imagined that below the clouds there could be a wet and Earth-like environment. Mayer, however, found the microwave radiation emanating from Venus to be very bright.

"The signal was too strong to be from an Earth-like planet," said Kenneth J. Johnston, scientific director of the U.S. Naval Observatory, who worked for Mayer in postdoctoral research 35 years ago.

Instead, the brightness of

the Venus measurements, published in 1958, corresponded to a temperature of 600 degrees.

"It was very, very hot," Johnston said. "That was a big discovery in those days. That was before we had any planetary probes."

Similar measurements of Mars and Jupiter found temperatures that fit with what astronomers expected, suggesting that Mayer's technique was sound.

Cornell Mayer was born in Ossian, Iowa, and graduated from the University of Iowa in 1943. He served in the wartime Navy and then received a master's degree in electrical engineering at the University of Maryland in 1951.

After his early Venus discovery, Mayer developed detectors of increased sensitivity for use on radio telescopes, allowing him to measure temperatures of planets. A few years afterward, he collaborated with Charles H. Townes, a professor of physics at Columbia who later shared a Nobel Prize for development of a "maser," a forerunner of the laser. Mayer installed a maser on his radio telescope, allowing measurements that were more sensitive still.

"That was the first time a maser was used in a practical way," Johnston said.

Mayer retired in 1980 from the Naval Research Laboratory, where he had headed the radio astronomy branch.

In addition to his wife, he is survived by a daughter, Carolyn Elizabeth Mayer of Alexandria.

*Kenneth Chang,
The New York Times*

Giant impact theory holds that collision of planets created satellite

Alastair G.W. Cameron, a Harvard astrophysicist who helped develop a revolutionary theory to explain how the moon was formed, died on Oct. 3 at his home in Tucson, Ariz. He was 80.

The cause was heart failure, his family said.

Cameron's giant impact theory holds that a planet roughly the size of Mars struck Earth, sending fragments of Earth's mantle spinning into space. The ring of debris may have ultimately come together to form the moon.

Cameron was a former associate director for planetary sciences at Harvard and was chairman of its astronomy department from 1976 to 1982.

He and others, principally William K. Hartmann of the Planetary Science Institute in Tucson, proposed the impact theory in the 1970s and developed it in later decades. The two scientists had been working independently on the idea when Hartmann presented his research at a meeting at Cornell in 1974.

The theory accounts, in part, for the moon's lack of water and its few volatile elements, which would have been burned away in the planetary collision.

Michael J. Drake, a planetary scientist who is director of the Lunar and Planetary Laboratory at the University of Arizona, said Cameron made "clever calculations using advances in computing power and realized that such debris could possibly coalesce."

Drake observed, "The giant impact theory, which since the '80s has become largely accepted in the scientific mainstream, became a brilliant synthesis of earlier, flawed hypotheses about the origin of the moon."

Cameron was also interested in how chemical elements are formed inside stars, a field known as nucle-

osynthesis. He continued to study the origins of the solar system and in particular the importance of the explosions of large stars, or supernovas, that appear to create new stars in their destruction.

The son of a Canadian biochemist, Alastair Graham Walter Cameron was born in Winnipeg. He earned his undergraduate degree from the University of Manitoba and a doctorate from the University of Saskatchewan.

He taught at Iowa State and conducted atomic research in Canada before joining the National Aeronautics and Space Administration, serving as a senior scientist from 1961 to 1966. He became an American citizen in the 1960s.

Cameron later became a professor of space physics at Yeshiva University, where he taught from 1966 to 1973. He then taught at Harvard, remaining there until 1999, when he moved to Tucson. He continued to work as a senior research scientist at the Arizona lunar laboratory until last month.

In September, the American Physical Society's division of nuclear physics awarded Cameron its Hans A. Bethe Prize.

Cameron's wife, the former Elizabeth MacMillan, died in 2001. The couple lived in Belmont, Mass.

He is survived by a sister, Janet Matthews, and a niece, Valerie Matthews Lemieux, both of Winnipeg, and by two nephews.

*Jeremy Pearce,
The New York Times*

