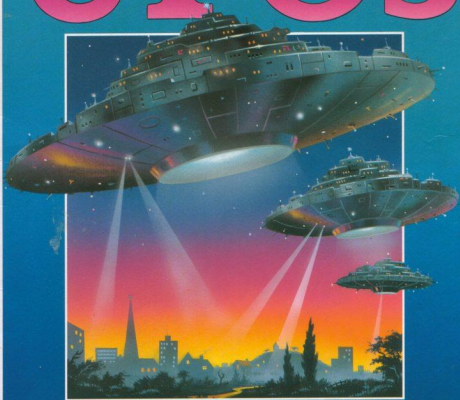


USBORNE WORLD OF THE UNKNOWN

UFOs





The World of the Unknown

ALL ABOUT

UFO's

Although it looked like a weather balloon, this UFO, equipped with a box from which flashed orange-red lights, moved into, rather than with, the wind. Rex Pixley of California, USA, who saw the UFO, went and stood directly underneath as it hovered 6 metres up in the air. Suddenly the UFO rose up 30 metres and drifted slowly away.



Two men from Arizona, USA, claimed to have been captured in 1971 by creatures like this. One creature, 2.6 metres tall, is shown here operating a device which appeared to be used to process medical information. The men claimed they were taken aboard a huge flying saucer and examined with a probe linked, via this machine, to a giant computer.



In Spain, Raphael Jimenez and Manuel Perez were driving near Seville early one morning in 1968. They reported that they suddenly saw this flying saucer, glowing and flashing, sweep fast across the treetops ahead of them.



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The World of the Unknown

ALL ABOUT

UFO's

About this book

For centuries people have been seeing strange lights and shapes in the sky, and weird creatures walking the Earth, but in recent years there seem to have been more of the 'objects' than ever. Researchers have tried to find out more about them, but while many have been explained there still remain a few which defy identification.

All about UFO's investigates UFO case stories. It tells you what is known of the flying saucer mystery and suggests some possible solutions to it. Where do UFO's come from? Are they spaceships guided by creatures from other worlds? Are they figments of people's imaginations?

You can find answers to some of these questions in this book and learn how to make your own UFO model; how to fake a UFO photograph; and even how to go hunting for real UFO's.

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What is a UFO?

History is full of stories of strange apparitions in the sky. But it was only after World War 2 that these sightings first attracted serious attention.

It all began on June 24, 1947. Kenneth Arnold reported seeing a formation of gleaming discs flying over the Rocky Mountains in North-West America. He described them as "skipping like saucers across water", and the name flying saucer quickly captured the public imagination. An official investigation adopted the more cautious name of Unidentified Flying Object. All strange sightings in the sky are called UFO's (pronounced You- Foes).

Once investigated, most UFO's turn out to be nothing of the kind. Others are given likely explanations. But for about one in five there has been no official explanation yet. They do not appear to be natural in origin - but they cannot be man-made either. For example, Arnold's 'saucers' were travelling at nearly twice the speed of sound in the days before the breaking of the sound barrier.

Some of these mysteries are probably hallucinations or hoaxes. Others may be explained by future scientific research. Another idea is that UFO's come from outer space.



▲ Kenneth Arnold was alone in his small aeroplane high among the Rocky Mountains in Washington State, USA, when he spotted nine "saucers" flying in formation between distant peaks at about 1,900 kph. It became the first official UFO sighting.

All kinds of UFO

Although UFO's are popularly known as flying saucers, they come in a wide variety of shapes. The four most common of these are shown on the right, together with three shapes

less often reported. UFO's appear to range in size from a few metres across to hundreds of metres. The pictures below are a guide only - there are many variations.



This object's shape and features are typical of many UFO's. It is circular and has a cone-shaped top with 'portholes'. One like it was photographed by a farmer in Oregon, USA. UFO experts still consider his photograph, on which this picture is based, to be genuine.

A UFO like this was spotted in October 1965 in Minnesota, USA. The police officer and four other witnesses who saw it watched it hovering in mid-air. It changed colour from white to orange several times, then flew off making a whirring noise as it went.

This curious UFO, looking like a household steam iron, was sighted twice in 1971 near Loch Ness, Scotland. On the second occasion it landed; three figures climbed in and the UFO took off. The people who claimed to have seen this activity did not, however, see the Loch Ness Monster at the same time.



This craft looks like two dinner plates stuck together – another shape typical of UFO's. The ring of lights around the rim may pulse and change colour. The jets of light coming out from underneath are less common. UFO's in daylight are usually white or metallic. At night they glow red-orange.



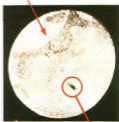
A UFO like this, about 8 metres across, was seen on April 2, 1966, flying about 50 metres above Melbourne, Australia. The man who photographed it wished to remain anonymous in case he was ridiculed. This picture is based on his photograph.

This UFO was spotted cruising 100 metres above the ground in Richmond, Virginia, USA. Its oval-shaped body was judged to be about 30-38 metres long by 10 metres wide. Its edge glowed and it was surrounded by what looked like gas or vapour. The purpose of the oval in the centre is unknown, but if the UFO were some sort of aeroplane it could well have been an air intake for engines.

Astronomers and the spindle-shaped UFO

One early description of a UFO comes from Switzerland. On August 9, 1782, a Basle astronomer called de Rostan saw an enormous dark spindle-shaped object, surrounded by a glowing outer ring, move slowly in front of the sun. The same thing was seen by a second astronomer.

Sun's disc



The mystery object seen by Professor Bonilla

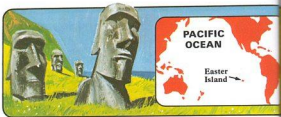
The object seen by the two Swiss astronomers may have looked something like the picture above. This UFO was photographed through a telescope as it crossed the sun's disc, and may be the first photograph of a UFO ever taken. It was one of several hundred such objects seen in Mexico in the early 1880s. The picture was taken from the observatory of Zacatecas in Mexico, by Professor Bonilla, on August 12, 1883.

UFO's in history

Did UFO's visit the Earth thousands of years ago?

Legends, signs and spectacular achievements, surviving from the days before history was written down, suggest that ancient man possessed knowledge which is lost to us. It has been suggested that creatures from other worlds could have been the teachers, the gods, even the ancestors of former civilizations.

Here are some examples of these early puzzles. Many, if not all, of them have explanations which are nothing to do with UFO's. It is the lack of proof either way which keeps their fascination alive.



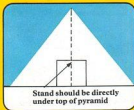
▲ Hundreds of these stone giants stand half-buried on Easter Island in the Pacific Ocean. They weigh up to 50 tonnes and stand 10 or 20 metres high. Some researchers believe that they represent demonstrations of UFO technology. Thor Heyerdahl (who

called across the Pacific Ocean in a raft called the Kon Tiki), made various experiments, both in constructing rafts and in raising the giant statues. He concluded that it was possible for the islanders to have constructed them with no outside help at all.

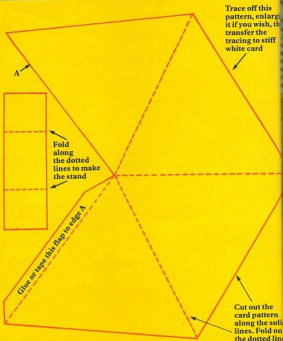
Pyramid Power

Some researchers believe that the pyramids of Egypt were built with the help of advanced UFO science. There is no evidence for this, but the pyramids do contain mysteries which science has yet to explain.

Experiments have been made with scale models of the 4,500 year old Great Pyramid of Cheops. Pieces of food placed inside dried out quickly and so were preserved instead of going mouldy. The plan shown here explains how you can make your own pyramid. When you have assembled it, try preserving a bacon rasher inside the pyramid and another in a shoe box. See whether the pyramid-shape preserves better than a box-shape.



▲ Use a compass to align your pyramid base exactly North-South and mark its position so you can lift it up occasionally to look at the bacon. Keep the bacon on top of the stand in the pyramid.





the Nazca in Peru, South America, a
in 400 metres above sea level is cut
straight tracks up to 8 kilo-
long. Seen from above they
resemble an airfield on which
might have landed long ago.
ground plan of London's Heathrow

airport is shown in the inset for you
to compare. The construction of the tracks
is very primitive - they are just cleared
swathes on the rock surface. They may
be connected with early astronomy, but
it is unlikely they were built with the
help of advanced UFO technology.

Prehistoric astronauts

Over the ages artists have depicted
many images we cannot understand.
A few of them show figures with
strange features which, some say, are
early man's attempts to portray UFO
astronauts who visited them. But the
fact they are unfamiliar to us is no
evidence that they depict creatures
from space.



▲ This ornate bronze statue, 60
centimetres high, was found in Japan.
It looks like a figure in a space-suit
with goggled helmet and equipment
straps, but might as easily represent
human armour, or some kind of
ceremonial dress.

◀ A Mayan tomb, 1,300 years old, at
Palenque, Mexico, is decorated with
this complex design. It bears a
curious resemblance to a creature
operating a spaceship. From this
angle it looks a little like a spacecraft
taking off.



600 Years of UFO spotting

UFO spotting is nothing new, but
the recording of reports is. Before
the development of newspapers
there were very few records of
UFO activity.

This does not mean that UFO's
never appeared, but only that few
people could write down what they
saw. That is why many early UFO
reports come from monasteries,
which were places of learning.

- On January 1, 1254, a mysterious
coloured ship is supposed to have
appeared over St. Albans in
Hertfordshire, England. Its presence
was recorded by the monks there.

- Then, in 1290, records tell us all
activities at Bylands Abbey in
Yorkshire, England, came to a
standstill when a large silver disc
flew slowly overhead.

- Very few cases were recorded
over the next 400 years. But the
expansion of newspapers and
personal records in the 18th
Century changed the situation.
Here are some examples:

- London, England, December 11,
1741, 9.45 pm. Lord Beauchamp
saw a small oval ball of fire
descending from the sky. At a
height of about 800 metres it
levelled off and headed eastward, a
long fiery tail trailing smoke, until
it disappeared in the distance.

- London, England, March 19,
1748, 7.45 pm. Sir Hans Sloane
saw a dazzling blue-white light with
a reddish yellow tail dropping
through the western evening sky.
After half a minute it vanished into
the dark landscape.

- Embrun, France, September 7,
1820. A stream of saucer-shaped
objects crossed the town flying in
formation. While over the town
they changed course and made a
perfect ninety-degree turn keeping
to their strict formation.

- Niagara, USA, November 13,
1833. A large square luminous
object hovered for more than an
hour above the Niagara Falls.

Target Earth

1952 was a particularly good year for UFO sightings. As well as the 'Washington Invasion', described on the right, there were some 1,500 reports of UFO's that year in different parts of the world and more than 300 of them remain unexplained.

UFO's often occur in waves like this. The map below shows where and when such waves have taken place. Sometimes UFO activity is confined to particular regions, where people who have never heard of UFO's report an unusual number over a short period. Time of year also seems to play a part in the sightings—UFO's are particularly active in spring and there is a summer season in July.

Of course, newspaper reports contribute to the upsurge of UFO incidents. It is curious that even when there are many witnesses, accounts of one sighting may differ.

Once the idea of UFO's has been planted in people's minds they are more likely to start "meeting Martians" and their 'sightings' have to be treated with caution. Sometimes a UFO which mystifies a great many witnesses, and for which there appears to be no known cause, turns out to be man-made and easily explained. The 'UFO' over Lisbon, described on this page, is an example.

The Washington invasion

Place: Washington, USA
Date: July 19 and 26, 1952
Time: From 10.00 pm

One of the most famous of all UFO events is the so-called 'Washington Invasion'. One summer evening the citizens of the United States capital were treated to a display by five strange lights which manoeuvred for hours over the White House, the city and the countryside around.

A week later, the lights re-appeared. This time there were between 6 and 12 of them and they moved too fast to be aircraft.

Two F94 jet interceptors were scrambled to investigate them, but the pilots could find nothing and returned to base. However, when a third jet was sent up the pilot radioed that he was approaching a cluster of huge blue and white lights. As he closed in on them the lights moved to form a ring around him and travelled along with him for about 15 seconds before moving slowly away.



UFO Waves

This world map shows the places and years when large numbers of UFO's have been sighted.





The flying cross

Place: Hatherleigh, Devon, England
 Date: October 24, 1967
 Time: 4.00 am

Police constables Roger Willey and Clifford Waycott were on routine night duty in their patrol car when they suddenly saw bright lights in the shape of a large cross pulsating in the sky ahead of them. As the patrol car drove towards it, the cross moved silently away. The policemen chased through the narrow lanes after it, but the cross always managed to accelerate away from them.

Eventually it moved off across the fields and the policemen gave up.

Once the sighting found its way into the papers, flying crosses were reported up and down the country. For a time it was thought the lighted 'cross' might be a tanker plane, like the one shown in the small picture above, surrounded by smaller aircraft on refuelling exercises. The British Defence ministry agreed that such



exercises were taking place in that area, but that all the exercises had been completed by 9.00 pm. This was hours before the flying cross sightings, and the explanation had to be abandoned. Another suggestion was that the policemen had chased the planet Venus, unusually bright in the sky at that time. But this seems unlikely, and the flying cross mystery has never been solved.

Airway intruder

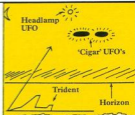
Place: South of Lisbon, Portugal
 Date: July 28, 1976
 Time: 5.00 pm

A British Airways captain flying a Trident 2 was alerted by Air Traffic Control, Lisbon, to a brilliant white light "just sitting there" in the sky on the captain's right hand side. As crew and passengers watched, two long cigar-shaped brownish objects, like thick vapour trails with solid centres, suddenly appeared below the light.

The sighting was publicized as an extraordinary UFO, until the Science Research Council, London, revealed what seemed to be the most likely cause. The 'UFO' was, in fact, a giant

research balloon at very high altitude, catching the light at sunset. The sun's rays reflected through the plastic fabric of the balloon to make it appear lit-up inside. The balloon had been launched in Sicily and was making its way to the United States, equipped with scientific instruments. By day the gas inside the balloon expanded, causing the balloon to rise, but at sunset when the gas cooled the balloon would sink.

To prevent it crashing, ballast was automatically dumped overboard each evening and it may have been this which the witnesses described as 'cigar shaped objects'. On the other hand, they may have seen clouds of fine steel shot which were released to measure wind-drift.



▲ This sketch is based on the Trident captain's drawing of the Lisbon 'UFO'. Notice the haze above the horizon after sunset, and the angle (arrowed) of the captain's view of the 'UFO'.

Close encounters

Close sightings fall into three classes. These were defined by Allen Hynek, an astronomer and UFO expert, who was a consultant to Project Blue Book, described on the page opposite.

The first kind of encounter occurs when a UFO is seen in the sky or on the ground. It becomes the second type of encounter if the UFO leaves evidence behind, such as holes in the ground

or burn marks on surrounding bushes. An encounter of the third kind occurs if creatures are seen in the case described below. Encounters of all three kinds are found on this page.

Encounter at Socorro

Place: Socorro, New Mexico, USA

Date: April 24, 1964

Time: 5.45 pm

In 1964, Project Blue Book recorded a new type of UFO event—the sighting of unidentified alien creatures.

Police Officer Lonnie Zamora, pursuing a speeding motorist among desert hills near Socorro, was distracted by a sudden roar and a bluish flame in the sky ahead. He left the road and drove up a rough hill until he spotted what he thought was an overturned car about 150 metres off the road.

The first UFOonauts

As he came closer he saw it was an oval, silvery object on four feet. It was marked with a red insignia. Two small human-like figures, wearing white garments similar to overalls, moved around near the object. Zamora approached them with the idea of helping, but as soon as the figures caught sight of him they seemed alarmed and jumped into their mysterious craft.

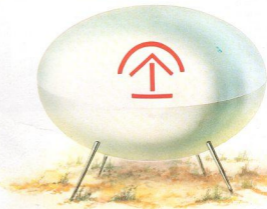
UFO blast-off

Zamora then heard a roar which grew louder and louder. A brilliant blue flame flashed from beneath the craft and the terrified policeman turned and fled as the object rose into the air. "I was scared of the roar," says Zamora. "I looked up and saw the object going away from me... The roar stopped. I heard a whine... then complete silence."

When UFO researcher Allen Hynek re-visited Socorro four months later he was struck by the illogical choice of the UFO landing sight and by the reliability of Zamora as a witness.

Unsolved mystery

The sighting has never been explained. The US Airforce put out a statement which implies the UFO could have been a test flight. But this seems unlikely, as no man-made oval object is so far known to have flown successfully.



▲ Shown above is the strange craft described by Lonnie Zamora. It was about five metres long and carried a sign which did not belong to any known air force. UFO's with insignia are rarely seen, and these markings have puzzled experts for years.

▼ This picture shows the landing site which was searched by Zamora and his police chief. They found four wedge-shaped prints of the UFO's 'feet' (arrowed in picture), footmarks and patches of burning scrub after the craft took off.



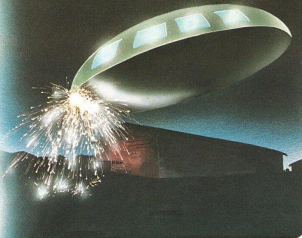
The night flier

Place: Marseilles, France
Date: October 1952
Time: 2.00 am

Shown on the right is the craft which customs officer Gabriel Cachinard said he saw at Marseilles Airport. He was sitting near the hangars when he noticed a light approaching from the left, low and silently at over 200 kph. It did not slow down smoothly—it just stopped dead on the runway. He walked towards it and, in the glow of the hangar lights, saw an object about five metres long and one metre high.

Shower of sparks

From 'windows' about 30 centimetres square came a pale light, changing from greenish to bluish. Then, while he was still 50 metres from the object, Gabriel saw a shower of sparks shoot out from underneath one end. It took off with a soft swish and vanished within seconds. There are few reports of UFO's landing at airports and this one is curious as the landing had no apparent purpose.



The radioactive egg

Place: Baltimore, Maryland, USA
Date: October 26, 1958
Time: 10.30 pm



Two motorists turned a corner to see a glowing, egg-like object about 30 metres long hovering above a bridge 250 metres away. Their car stalled as they approached, and they hid behind it. 30 seconds later a brilliant light and a wave of heat flooded from the object accompanied by a thunderous roar. Then it shot upwards, vanishing in 10 seconds. Later, both motorists' faces showed signs of what doctors thought were radiation burns.

PROJECT BLUE BOOK

An official UFO investigation was begun by the US Air Force in 1947. Its purpose was to see if UFO's posed a security risk. The operation was named Project Sign. In 1949 it became Project Grudge and, in 1952, was renamed yet again to become Project Blue Book.

Unsolved mysteries

By 1969 about 40,000 reports had been investigated. Most were explained; some were guessed at; a few remained unsolved. Then the US Air Force ordered a special study of its collection to determine the value of further research into its UFO files for the advance of 'scientific knowledge.' This was called the Condon Report after Dr Edward Condon who headed it.

The files re-opened

Dr Condon concluded that the evidence did not justify further study of UFO's, and although his report came in for considerable criticism Project Blue Book was closed in 1969. Since then, so many UFO events have occurred that the Air Force is believed to have opened its files once more, this time as Project Old Blue Moon.

"Scramble...UFO!"

Every day air forces dispatch (or 'scramble') fighter jets to investigate suspicious radar signals. The target usually turns out to be an ordinary aircraft but occasionally it is thought to be a UFO. These UFO intruders escape at speeds so great no supersonic fighter can ever catch them.

Mantell's last flight

Place: Madisonville, USA
Date: January 7, 1948
Time: 2:00 pm



A huge object in the sky above Kentucky, USA, was seen by hundreds of people and three P-51 Mustangs were sent up to investigate it. After a few minutes one of the pilots, Thomas Mantell, radioed that it "appeared to be metallic." The other two pilots gave up the chase but Mantell decided to follow it up. He tried to reach 9,000 metres, but radio contact was lost abruptly. Later that day Mantell's aircraft was found completely destroyed 135 kilometres away. The press described Mantell as the first (and so far, the only) UFO 'victim.'

Star in the east

Place: Tehran, Iran
Date: September 9, 1976
Time: After midnight

A brightly lit object in the midnight sky over Tehran brought a flood of phone calls to Iranian Air Force Command. But it was 110 kilometres further north by 1.30 am when an F4 Phantom jet took off to investigate.

As the aircraft came within 50 kilometres of the target, radio contact with base suddenly ceased. The pilot quickly turned back and found that his radio started to work again, away from the UFO's influence.

Flashing coloured lights

A second Phantom (shown on the right), flown by Lt. Fafari, took off at 1.40 am. He approached the object at supersonic speed but the UFO accelerated away with lights flashing blue, green, red and orange in rapid succession.

Then a small brilliant object left the UFO and shot towards the Phantom. Fafari prepared to fire an AIM-9 missile, but before he could do so all weapon controls, instruments and radios failed.

Pursued by a UFO

He managed to dodge the object by diving steeply. It followed him for several minutes before returning to the 'mother ship.' Fafari then

found his electrical systems were working again and he resumed the chase. He was able to pace the UFO but not catch up with it. The strange craft's size was difficult to tell because of its brilliance, but on Fafari's radar it looked about the same size as a 707 jet.

A UFO heads for Earth

Then another brilliant object detached itself from the UFO. This one dropped towards the Earth far below. It landed gently and its brightness lit up the landscape over an area of two or three kilometres. Fafari flew down and circled the dazzling light, noting its position. Then suddenly the object went dark. The Phantom returned to base, and as it landed a small cylindrical craft approached and passed overhead.

No trace

This last object was also seen by people on the airfield. But no trace of the shining landing craft was ever found. At first-light a search crew examined the area. The only evidence was a report by a local farmer of a loud noise and a light in the middle of the night.

UFO's over England

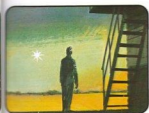


Place: Suffolk, England
Date: August 13, 1956
Time: From 9.30 pm

This story has become one of the 'classic' UFO sightings. Several objects were seen by many witnesses and were tracked on radar. They remain unexplained. The first UFO was sighted by a radar operator at Bentwaters, an air base in eastern England. It was just under 50 kilometres away when the radar picked it up. The UFO's speed was calculated to be over 8,000 kph—so fast that it should have produced a sonic boom. But the UFO travelled in complete silence.



▲ The radar operator then picked up an irregular group of 12 to 15 objects 13 kilometres south-west of Bentwaters. They were travelling north-east at about 150 kph and were led by three more UFO's flying in triangular formation.



▲ At about 10 pm a sergeant, who knew about the objects on the screen, was standing outside the control tower when he saw "a light the size of a pinhead" which hung in the sky for about an hour. But this light was later thought to be the planet Mars.



▲ A T33 two seater jet was sent up to investigate, but the pilot could see nothing unusual and the T33's own radar picked up no signals from the mysterious objects. After 45 minutes of fruitless search the jet returned to base. It looked as if the UFO's had disappeared.

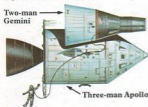


▲ But at 10.55 a UFO crossed right over Bentwaters and was described by two witnesses as a "blurred light." People at the nearby base of Lakenheath watched as a low-flying object approached them, then apparently stopped in mid air. It disappeared and was never seen again.

Encounters in space

Perhaps the best place to see a UFO would be in outer space. There are many reports by American astronauts of puzzling objects and flashes of light, but none of these sightings is conclusive. The windows of a spaceship are very small and the pilot is often unable to give clear details of objects outside. Whether or not astronauts see them, Astronaut John Young is probably right to believe UFO's do exist. He said: "There are so many stars that it's mathematically improbable that there aren't other life sources in the Universe." You may agree with him when you read about life in outer space on page 24.

Space hardware



▲ The 10-mission Gemini programme was used to develop techniques for Moon flights. The Apollo spacecraft, designed especially for Moon missions, was also used in Earth orbit for the Skylab space station in 1973 and the joint Russian-American flight in 1975.

The egg in orbit

Place: Earth orbit
Date: June 1965
Time: 20th orbit

The first space UFO was seen by astronaut James McDivitt through the window of his Gemini 4 spacecraft. Early in the four-day mission, when his co-pilot Ed White was asleep, McDivitt glimpsed an object some 15 kilometres from the capsule which he described over his radio as having "big arms sticking out of it." He took pictures of the object before it disappeared, but curiously he was never able to find those pictures when the films were processed.

McDivitt's UFO

A short while later, a photograph appeared in the press which claimed to be 'McDivitt's UFO.' It showed an egg-shaped blob of light like the one in this picture, and though McDivitt denies that this is his missing photograph the incident was never cleared up. NASA, the American space agency, says the "UFO" was glare reflected off a window bolt seen through the smudged pane.

Another suggestion

Another investigator suggests it was the Gemini's own Titan-2 second stage booster rocket in a nearby orbit. But the fact is that no-one really knows what McDivitt saw.



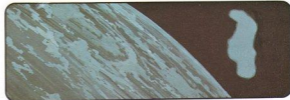
Apollo 11's UFO report

Place: Earth orbit
Date: July 1969
Time: Unknown

Some of the strangest sightings have been made during Apollo missions to the Moon. On the very first landing mission, Apollo 11, the crew spotted a large object flying in the same direction as themselves.

The object was too far away to be described clearly, but you can see an impression of it in this picture.

Examined through a small telescope, it sometimes resembled a tumbling,

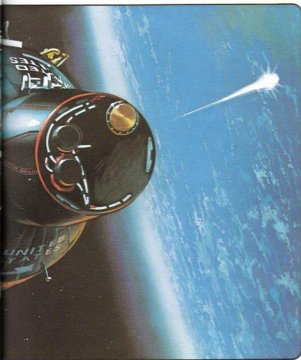


hollow cylinder. But an adjustment of focus gave it a clear 'L' shape, "like an open suitcase," said Neil Armstrong.

The crew thought it must be their own cast-off SIV-B booster rocket, until told by ground control that the

SIV-B was 10,000 kilometres away. One researcher has suggested the object was a fragment of insulation material.

The Apollo 12 crew reported a flashing object that accompanied them until it flew off at high speed.



Biggest UFO in the universe?

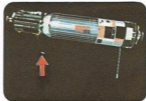


Of all the theories as to how the Moon came into being, the most extraordinary comes from two Russian scientists, Mikhail Vasin and Alexander Sheberbakov. They suggest that the Moon is an artificial satellite – a huge ancient Noah's Ark of a spaceship – which was projected into Earth's orbit deliberately by creatures from another world when their own planet became impossible to live on. If this is so the Moon may be hollow, with a thick outer crust protecting equipment and perhaps even the remains of a whole civilization which was incarcerated for centuries inside. But there is slender evidence for this colourful theory and, until further proof emerges, the possibility that the Moon was once a spaceship stays remote.

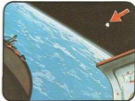
IFO's – Identified Flying objects

Astronauts return to Earth with many pictures of the strange objects they have seen in space. Most of them are easily explained but a few escape identification for long enough to earn a reputation as UFO's.

The crew of Gemini 11 sighted a spacecraft miles from any position they thought one to be. Years later it was identified as a Russian satellite, Proton-3, which was in the last stages of its orbit before dropping lower into the Earth's atmosphere. It burned up 36 hours after the astronauts saw it.



▲ One 'UFO' photographed from Gemini 12 turned out to be the Agena booster rocket. The small bright 'UFO' (arrowed), revealed by the photograph, is thought to be a reflection inside the camera lens.



▲ This distant object was also photographed during the mission of Gemini 12 through the open hatch door of the capsule. It was eventually recognised as a piece of rubbish from the Gemini craft itself.

Odd aircraft

Not all UFO's come from outer space. Aircraft engineers have designed lots of odd-looking machines which could easily be mistaken for alien craft.

Unfortunately for flying saucer enthusiasts, the disc-shape does not fly very well. In fact, the saucer shown in the big picture on the right wobbled so much that it had to be tied down with steel cables. Its safe flying height was only 1.22 metres off the ground.

Other designers have changed the disc-shape to an oval with better results, but it seems that ordinary aircraft with wings and a fuselage fly best of all.



▲ This tiny plane, called the 'Fliegender Pfannkuchen,' was built in Germany during World War 2. Few details of this flying pancake are known. It was only a research machine equipped with a wooden propeller, and never went into active service.

The 'Flying Flapjack'

Engines buried in saucer shaped wing

This twin-engined plane was called the Chance Vought XF5U-1. It was designed to fly from American aircraft carriers. It could take off in very short distances—less than 60 metres—yet it could still fly at speeds over 600 kph.



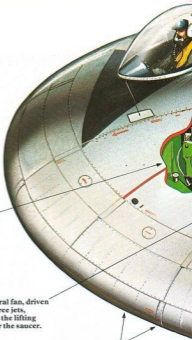
Turbine propeller unit

► This flying saucer, called the Avro Avrocar, first flew in Canada in 1959. It was designed to take off vertically, fly at 480 kph, and be able to stop in mid-air to hover at any height. But the jet-powered craft was not a success, and the project was abandoned.

The saucer had three J69 jet engines arranged in a triangle around the central fan. The exhausts from the jets spun the fan.

The central fan, driven by the three jets, provided the lifting power for the saucer.

The two-man crew sat under bubble-shaped canopies either side of the machine. The pilot sat on the left, the observer on the right.





This compartment carried different types of test instrument.

These circular vents covered the air intakes for the jet engines.

The saucer was 5.48 metres wide and weighed 1,815 kilogrammes. It could carry a 907 kilogramme load.

The outer rim of the saucer had a slit running around under it. Exhaust gas roared out of the slit so the saucer could cruise just above the ground like a hovercraft.

The egg shaped miniature helicopter

This odd looking machine is almost certain to be the cause of some UFO reports in the years to come. It is the Westland Wisp remotely piloted helicopter. The television-eye equipped Wisp is designed for armies to use for spying on enemy troops.

The Wisp has twin rotors to lift it into the sky. They are powered by two small engines.

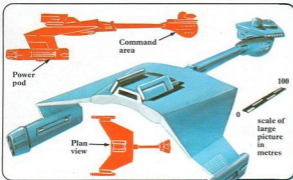
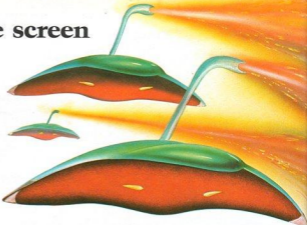
The Wisp can be carried on an ordinary Jeep. It can take off from any small flat space.



The Wisp can take off vertically, cruise at nearly 130 kph, then return to its 'pilot,' sitting in his jeep.

UFO's on the screen

Film makers have been building rockets and flying saucers throughout the 20th Century. Science fiction began on the screen in 1902 with 'A Trip to the Moon' by French film-maker Georges Méliés. But the first UFO appeared in 'The Airship Destroyers', made by Charles Urban in 1909. Some of the best early science fiction movies came from Germany. For one of them, 'The Girl in the Moon', a rocket was built which was so authentic that the film had to be destroyed. It was feared that foreign spies might make use of it. On this page you can see some of the famous film UFO's built since then.



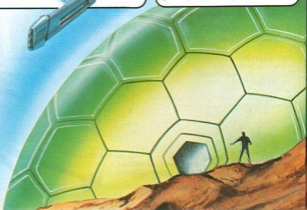
▲ This spaceship is an evil star of the television series 'Star Trek'. In this programme the Earth crew of the spaceship 'Enterprise' explore the planets and peoples of the galaxy. They encounter the Klingons, a warrior race who fight for control of the galaxy in spaceships like the one above. Though Klingon warships appear huge they are, of course, only models.

► 'It came from Outer Space' was the name of a film made in 1953 about a UFO landing. The UFO was a huge sphere of hexagonal panels, illustrated right, which half-buries itself in the desert of Arizona in America. Alien creatures control local people to make them help repair the ship. The film used a special technique so that when you watched it through coloured spectacles the images looked three-dimensional.

▲ These Martian war machines for the film 'War of the Worlds' were designed to be supported on pillars of electricity, but the million volts required were too dangerous. The final models were equipped with heat rays created by burning wire.

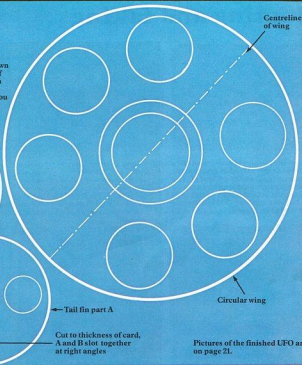


In the original book 'War of the Worlds' by H. G. Wells, the Martian war machines were like the three-legged mobile towers shown here. The tentacles held a box-like heat ray device.



Make your own UFO

Even though the secret of UFO propulsion has not yet been discovered, you can still fly your own UFO. All you need is a sheet of stiff card, tracing paper, a strip of balsa wood, sticky tape, glue and paint. Follow these measurements and you can make a UFO that really works.

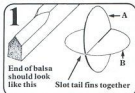


Pictures of the finished UFO are on page 21.

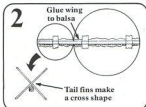


You need a strip of balsa wood
6 mm x 6 mm x 192 mm long

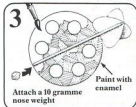
Making the UFO



▲ Trace the three discs on to the card. Make sure you transfer accurately the centreline on the large disc and the slot marks on the small ones. The two small discs slot together to make the tail unit. Cut out with a craft knife.



▲ Glue the untrimmed part of the balsa strip along the centreline of the large disc. The trimmed edge fits into the join of the tail unit where it is cemented. Make sure that the tail fins are at right angles to each other.



▲ Finally, add a nose weight of metal or plasticine. The UFO should glide in a smooth shallow dive. Adjust the nose weight until it does. You can make the UFO turn by bending the tips of the tail fins.

Hunting and faking

You might like to go UFO hunting for yourself. The best way to do this is to make a regular 'skywatch' from a hill or large open space. Take a note-pad, compass, pen, binoculars, a map and a loaded camera. Try and photograph your UFO first. Then write down as many details about it as you can. Take a friend with you, but do not compare notes until after you have made your report.

► This UFO Report Form is based on those made by various UFO research organizations. It shows the kind of information you need for a proper investigation of any sighting. Copy it out and keep it in your UFO hunting kit to use as a guide.

Fake photographs?



▲ This 'UFO' was photographed over California by George Adamski in 1952. Some have said it looks more like a picture of a chicken feeder than a flying saucer. Adamski claims he met a crewman from the UFO who told him the craft came from Venus.



▲ This photograph was taken in 1966 in Yorkshire, England. The photographer, Stephen Pratt, insists the picture is genuine. UFO experts doubt this because the UFO's are out of focus though the post and distant roofs are quite clear.

UFO Report Form

- 1** Place
 Date
 Time
- 2** How long was UFO seen for?
- 3** Angle of UFO in the sky

(mark on with pencil)

Position of UFO

Sketch UFO here
- 4** Appearance of UFO
 Shape
 Sound
 Colour
 Movements
 Number of objects
 Brightness
 (Compared to a star, Venus, Moon, Sun, etc.)
- 5** Name and address of witness (if any)
- 6** Weather conditions (Tick circle)

Clouds	Temperature	Wind	Precipitation
Clear sky <input type="radio"/>	Cold <input type="radio"/>	None <input type="radio"/>	Dry <input type="radio"/>
Scattered cloud <input type="radio"/>	Cool <input type="radio"/>	Breeze <input type="radio"/>	Fog or mist <input type="radio"/>
Much cloud <input type="radio"/>	Warm <input type="radio"/>	Moderate <input type="radio"/>	Rain <input type="radio"/>
Overcast <input type="radio"/>	Hot <input type="radio"/>	Strong <input type="radio"/>	Snow <input type="radio"/>
Other conditions if any			



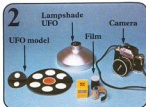
▲ An airline pilot of Avena Airways produced this picture in 1963. He claims he took it while flying over Venezuela. Perhaps you can see why it is a fake if you imagine yourself in the aeroplane taking the picture. The big shadow on the right is probably

one of the engines. Compare the steep angle of the aeroplane shadow just in front of it with the position of the UFO in relation to its own shadow. The shadow ought to be tucked closer underneath the saucer.

1 Faking a UFO

It is not too difficult to fool your friends by taking fake UFO photographs, but there is little point in trying to fool the experts. They know any UFO photograph is only as good as the report which goes with it, and they have seen all the tricks before.

The pictures on this page are all fakes. They were taken to show how convincing a hoax can look, and illustrate some of the mistakes made by fakers in the past. In each case the 'UFO' is either a lampshade or the 'World of the Unknown' UFO described on page 19.



▲ The equipment used for faking is shown here. All you need is a camera, in this case a single lens reflex (but an ordinary instamatic camera will do), and reels of film. Most UFO pictures seem to be in black and white, but colour film was used for these photographs.



▲ The photographer chose a park on a hill, and took most of the pictures lying on his back. The UFO was thrown over his head and he photographed it as it flew. He was not always successful, as you can see: in this shot he photographed the thrower, too!



▲ The effects of 'shooting' into the Sun can be spectacular. The prism-like lights in the picture above are simply reflections in the lens of the camera itself. Here, the UFO looks as if it is about to make contact with its mother ship before speeding off into space.



▲ The picture on the left is the same UFO as in pictures two and three. The effect is caused as the craft flipped on its side, caught by the high wind which was blowing at the time. The picture on the right shows what might be called a close encounter with a jumbo jet.



▲ This picture of the lampshade UFO shows an unforeseen hazard for the UFO faker. It looks like a rather bad photograph with a wire obviously holding up the UFO. In fact the 'wire' is the blue plastic tail of a kite which was flying 100 metres behind the UFO.



▲ This is probably the best picture of the day. The UFO is high in the sky with no possible means of support, and it is very difficult to tell how large it is. The camera followed the 'UFO' across the sky, blurring the background. Ask your friends to judge this shot—fact or fake?



▲ This menacing 'UFO' was actually photographed from indoors. The same camera and film were used, but the UFO was a paper shape, cut out and stuck on a window. The window was cleaned inside and out and the camera was held only 40 centimetres from the 'UFO.'



▲ The 6-centimetre 'UFO' was joined by another, again of paper but a different shape. UFO's look bigger and more realistic if the landscape is fairly distant, so keep foreground to a minimum. The sharper the UFO image, the nearer it looks.

Mistaken identity

The majority of UFO reports are traced, after careful examination, to objects or effects already known to man. This is quite understandable. If all sightings remained unexplained there would be just too many UFO's around to be convincing. It is the few that defy explanation which keep the experts thoroughly intrigued.

This page is a guide to some of the most common UFO illusions. You can use it to check any UFO's you might see. If your sighting fits none of these explanations it could be worth investigating further.



▲ Clusters of white lights, looking like alien craft, passed in V-formation over Lubbock, Texas, USA in 1951. The experts were foxed for years before they realized the 'craft' were flights of migrating geese. The city lights were reflected off their white bodies.



▲ Giant balloons are used to carry scientific instruments to the upper atmosphere. From 15-20 kilometres altitude the balloon is bathed in light even though the Sun has set on the Earth below. The aluminium fabric of the balloon shines brilliantly in the sky.



▲ Low cloud or fog can be highly reflective. If the source of light is concealed, as shown here, where a car is on the other side of the hilltop, headlights shining through cloud can create an uncanny glow in the sky. The lights change as the car moves.



▲ Ball lightning occurs rarely and little is known about it, but in thunderstorms you may see one or more luminous balls, 10 to 20 centimetres across, which crackle as they roll slowly across the sky. Ball lightning may vanish in seconds or linger for several minutes at a time.



▲ There are many different kinds of kites, from boxes and diamonds to deltas and bird-shapes. Even their tails can cause confusion as you can see on page 21. A recent American study of UFO sightings showed that two of the 800 reports investigated were kites.



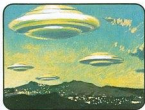
▲ Parachutes, glimpsed as they drop through broken cloud, can be very deceptive. They are often used for dropping military supplies, and as some loads (such as the one above) require several parachutes, you may see odd shapes as the parachutes fall.



▲ The curved glass used in the windows of cars, trains and aeroplanes can reflect objects which are outside direct vision and distort them beyond recognition. You can experiment yourself with a glass jar and spoon, as shown in the picture.



▲ The hot exhaust of an aeroplane contains moisture which condenses in cold air. This forms long ribbons of cloud, called vapour trails. Broken up by the wind, such trails sometimes form cigar shapes and shine in the sun long after the ground is in darkness.



▲ Saucer-shaped clouds can be formed by rising air over hills. Known as lenticular (lens-shaped) clouds, they may appear both in clear and cloudy skies. They sometimes cluster in 'formations' like a colony of flying saucers.



▲ Comets are made of ice, rock and dust. As they approach the Sun they develop a shining tail which can be millions of kilometres long. Seen from Earth, most comets look like tiny smudges. But a few look like vast streamers hanging in the sky.



▲ Red, green or white signal flares are used by ships in distress, by soldiers on manoeuvres and at airports for signalling aircraft without a radio. Flares produce a bright light in the sky which sinks slowly to the ground. The light goes out as it hits the earth.



▲ A lighthouse uses a rotating beacon which produces a pattern of short and long flashes to warn ships away from dangerous rocks. The light code repeats itself every few seconds and is therefore easy to check. The light is usually low on the horizon and does not move.



▲ Points of light shooting across the night sky are usually meteors—rocks and stones from space which burn up in the atmosphere. The Earth runs into several belts of meteoroids regularly each year, and in August and November meteor showers are very common.



▲ Even the familiar Moon may be unrecognizable at times, and is responsible for up to 5 percent of UFO sightings. When it is partially obscured by cloud or by the horizon, the parts which remain visible can look quite unfamiliar, both in colour and shape.



▲ 17 percent of 'UFO' sightings are identified as low-flying aircraft. At night a plane displays this light pattern: red on the left wing-tip, green on the right and white on the tail. You may see a red flashing beacon, a floodlit tail and headlights as the plane comes in to land.



▲ Stratus cloud, which produces a heavy grey sky, can be thin enough for the Sun to shine through it. But the image is diffused and distorted, and our familiar Sun is transformed into an eerie light glowing through the cloud in the daytime sky.



▲ The planet Venus is the most common UFO mistake of all. With other astronomical objects, it is responsible for 27 percent of all UFO's which have been identified. It is the brightest object in the sky after the Sun and Moon.

ALIEN ASTRONAUTS

Life in outer space

If UFO's do come from other worlds, these worlds are probably elsewhere in our galaxy.

All the stars you can see in the night sky belong to our own galaxy, called the Milky Way. It is pictured here—a huge whirlpool of stars, gas and dust slowly turning in space. Our Sun, an ordinary star with a family of planets, is about two-thirds away

from the galaxy's centre. There are more than 100,000 million stars in the galaxy and many of these could have life-bearing planets in their own solar systems. The Milky Way is just one in millions of galaxies, so it is very likely that intelligent creatures somewhere are pondering the same question as we are: is anyone there?

This tiny circle shows (to scale) how far radio signals from Earth have travelled out into the Galaxy. You can see from the size of the galaxy that they have barely made a start. One way to find other civilizations is to look for the radiation they send out—particularly the radio signals. If advanced civilizations are beaming signals our way, and the signals have reached the solar system, radio telescopes should be able to pick them up.

Origins of life



After the Sun and planets had formed from interstellar gas clouds, the Earth's internal heat caused the surface to melt and throw out huge quantities of gas and water vapour. This atmosphere was rich in

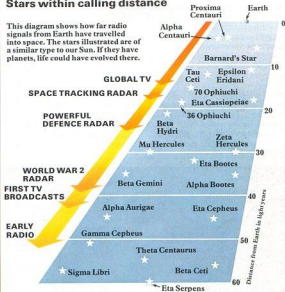
hydrogen and contained many kinds of chemical molecules which reacted together in sunlight and were deposited as a 'soup' in shallow seas. In time, amino acids and protein formed, and life began to develop. This process is

extremely complex, but there are 100,000 million stars in the Milky Way and many huge galaxies lie beyond, so it seems very unlikely that Earth is the only planet in the universe on which there is life.

The Milky Way is about 100,000 light years across. A light year is the distance light travels in a year—nearly 9,500,000 million kilometres, or over 299,270 kilometres each second. Radio waves travel at the same speed.

Stars within calling distance

This diagram shows how far radio signals from Earth have travelled into space. The stars illustrated are of a similar type to our Sun. If they have planets, life could have evolved there.



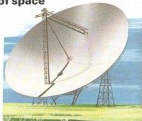
One day another civilization may pick up the radio, radar and space communications from Earth. Weak signals from the early days of broadcasting have already reached

stars 50 light years away. Stronger signals from our radars and television transmitters are following. Creatures from other worlds may be attracted here to investigate.

Listening to the sounds of space

Earth scientists are already probing the nearer stars for signals that might be coming from other civilizations. The quest began in 1960 when Dr Frank Drake began his Ozma experiment named after the fairy-tale kingdom of Oz. Using a 25.9 metre wide radio telescope at Green Bank, Virginia, USA, Drake recorded radio waves from the stars Tau Ceti and Epsilon Eridani—but heard no tell-tale signals from other civilizations.

Astronomers are now studying star clusters and other galaxies as well as individual stars.



▲ An even larger radio telescope is now being used at Green Bank in a new investigation of Sun-type stars.



▲ This rare Earth organism, which is shown here dividing in two, is proof that life can exist under very harsh conditions. It was found thriving in surroundings which may be similar to the thick atmosphere of Jupiter.

UFO nauts

There are two main theories about UFO's. One is that they are spaceships piloted by creatures from other worlds. The other is that they are hallucinations. Most sightings seem to be of man-shaped creatures or monsters from myths and legends. In fact, scientists think real space visitors would be most unlikely to look like men. Their evolution would have taken an entirely different course. If UFO's do exist, where might they come from? There are many sun-like stars within 60 light years of Earth. Any of them could have planets, perhaps with creatures living on them.

Encounters of the third kind

The tiny goblin-creature on the right was one of five apparently seen in 1955 by a farming family in Kentucky, USA. When the farmers shot at it they heard a metallic sound but the creature seemed unhurt. A few minutes later it peered in through one of the farmhouse windows and, when one of the farmers ventured outside, "a silvery hand...inquisitively brushed the man's hair." The creature became known as the 'Kelley-Hopkinsville Goblin.' The figure on the far right was reported near Zafrá, south-west Spain, in 1968. It was two metres tall, had long arms and glowing green clothing.



Is this the home of the Hopkinsville goblin?

It is difficult to believe that the 'goblin' really exists; but just suppose it does, what sort of world might it live on? Its planet could circle one of the nearer Sun-like stars, perhaps Eta Cassiopeiae A (see chart, page 25). This star, only slightly smaller than our Sun, has a small companion star which takes some 480 years to move round it. At certain periods, creatures living on a planet of the main star would see two suns in the sky. The main star is yellow with a greenish tinge, the other orange-red and much further away.

The goblin's fairly light build could mean that its world is smaller than ours and has less gravity. The planet would therefore have a thinner atmosphere, so the creature's chest—and lung capacity—would need to be large.

More of the radiation from the world's suns will reach the planet's surface if the atmosphere is thin so the goblin could have a dark pigmented skin. As sound travels badly in thin air it would have large ears. The farmers described their 'goblin' as having large eyes. This might suggest its natural surroundings are gloomy—perhaps the goblin's world is further away from the sun, and therefore much colder than Earth.

The tiny far-off companion star, Eta Cassiopeiae B, is already high in the sky, but casts little light and no warmth.

The 'morning star'—our own Sun—is still visible in the fading night sky. It is 19 light years away.

One of the spacecraft of the Goblin community rises at the head of a laser-like power beam. All the power equipment is under the circular take-off platform.

It is dawn as the star Eta Cassiopeiae A rises to warm the icy wastes of the goblin world.

This radar dish, though oddly proportioned, serves the same purpose as its counterpart on Earth, so its shape is very similar.

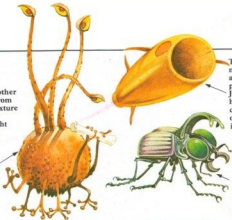
Even icicles are long and thin in the low gravity.



Even stranger creatures

Biologists believe life-forms on other planets could be very different from life on Earth. Man breathes a mixture of nitrogen and oxygen. But the inhabitants of other planets might breathe a different mixture.

The creature on the right is a kind of walking octopus. Arms and legs are interchangeable; eyes are on stalks; brain and stomach are both inside the body, with the mouth underneath. The 'hands' have no thumbs but are simply ropes of muscle.



This gas-bag creature might live in the atmosphere of a giant planet similar to Jupiter. It sucks in hydrogen gas and then contracts to squirt the gas out of its tail. It moves in spurts by jet reaction.

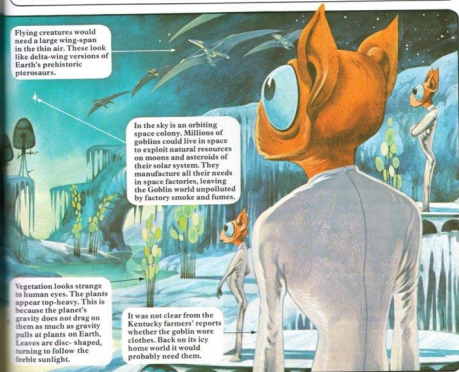
It is possible that insect-like creatures, like the one here, might have reached a much higher level of intelligence on other planets than they have on Earth.

Flying creatures would need a large wing-span in the thin air. These look like delta-wing versions of Earth's prehistoric pterosaurs.

In the sky is an orbiting space colony. Millions of goblins could live in space to exploit natural resources on moons and asteroids of their solar system. They manufacture all their needs in space factories, leaving the Goblin world unpoluted by factory smoke and fumes.

Vegetation looks strange to human eyes. The plants appear top-heavy. This is because the planet's gravity does not drag on them as much as gravity pulls at plants on Earth. Leaves are disc-shaped, turning to follow the feeble sunlight.

It was not clear from the Kentucky farmers' reports whether the goblin wore clothes. Back on its icy home world it would probably need them.



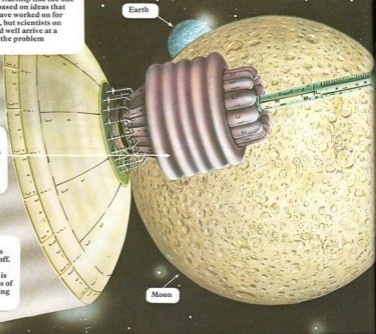
ALIEN ASTRONAUTS

Starflight

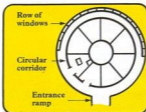
Intelligent creatures on other worlds could well build a starship like the one shown here. It is based on ideas that Earth scientists have worked on for interstellar travel, but scientists on other worlds could well arrive at a similar answer to the problem of starflight.

Like a tamed star, the fusion generator converts the fuels stored in the tubular tanks into heat, light and energy.

The fusion powerplant has just been shut off. This ghostly stream of light is all that remains of the once blinding exhaust flare.



It should not be surprising if advanced civilizations in other parts of the Universe have discovered how to travel between the stars. Earth scientists have already studied the problem. One idea for a starship is the photon rocket, shown in the picture above. The rocket exhaust is a blinding cone of radiation which would enable the ship to travel near to the speed of light, and so make interstellar journeys possible. Such a starship, in Earth orbit, might be the 'mother' of the UFO's which are said to invade Earth's atmosphere. People have described going aboard them and talking with their crews.



▲ While driving through New Hampshire, USA, in 1961 Betty and Barney Hill claimed to have 'lost' two hours of their lives after seeing a UFO. Later, under hypnosis, Betty described meeting humanoids aboard the craft. Barney drew this plan of the interior.



▲ While she was hypnotised Betty said she had been shown a star chart by the UFO's leader. Later, she sketched a map which showed trade routes (heavy lines) between star colonies and expedition routes (dotted lines). Names of stars were added to match known star patterns.

Flying saucers are attached to the starship's spine like hats on hooks.

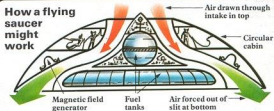
This starship is designed to travel at nearly the speed of light. Trips between the stars would take the crew only a few years to complete.

This cone-shaped shield is necessary to protect the crew from the deadly radiation given off by the starship's fusion powerplant

Saucers leaving the ship, perhaps on an expedition to Earth. One possible method of propulsion is shown in the box on the right. To move in space UFO's would need fuel stored in built-in tanks. They could refuel in Earth's atmosphere, and even re-supply the starship with vital air.

Fold-out communications antenna

How a flying saucer might work



This is the cross section of a design for a flying saucer which could actually work. It uses electromagnetic forces to move air on the jet-propulsion principle. Another theory is that 'saucers'

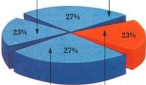
propel themselves at super-speeds by producing a powerful electric current to link with magnetic fields in space. An even more imaginative idea is that flying saucers come from another dimension in space and time.

UFO's - fact or fiction?

It is best to look for a simple explanation before jumping to the conclusion: "I've seen a UFO!" The chart on the right is based on information from the US Air Force Blue Book of UFO sightings between 1963 and 1967. It shows that most UFO's can be put down to wrongly identified familiar objects, and undoubtedly many of the 'unexplained' sightings could be put into the 'explained' category if there was more known about them. What of the people who believe they have actually met visitors from space? Does the human brain create them like the characters met in dreams, or

Meteors, artificial satellites and other near-Earth space objects

Aeroplanes and balloons



Stars, planets and other astronomical objects.

Unexplained sightings

could they be real?

There is little or no hard evidence for their existence. It is curious that if UFO's piloted by creatures from space are investigating Earth they have not appeared to more people or tried to make formal contact with man. They have come a very long way, possibly travelling for years to reach Earth, and it seems unlikely that they would content themselves with a brief sight-seeing visit. Until a UFO lands in a major city, is photographed and the crew interviewed, there is no way to prove that they exist.

The amazing world of UFO's

UFO stories, like fishermen's tales, may become exaggerated in the telling. But even if they are only partly true, they still suggest that amazing things are happening in the world. You can read about some of them on this page.



French UFO researcher Jean Bedet found this picture pinned to note to his car windscreen one day. The note explained that the photograph was taken near Albiosc in the Vosges mountains in France at 11.30 pm on March 23, 1974, by a witness who insisted on remaining anonymous.

He was a doctor, who had seen the saucer as he was driving home late at night along a deserted country road, after visiting a patient. The four white glowing bars at the base of the craft are thought to be either rays of light or landing gear. Though he was the only witness who photographed it, the anonymous doctor was not the only person to whom the saucer appeared. A similar craft was reported at the nearby village of Thillot, and about 300 kilometres away in the Swiss village of Taverna.

In Sweden alone there were about 1,000 UFO reports in 1946. Most of the reports concerned 'rocket-shaped' objects, which have never been identified.

UFO's are most often seen between the hours of 9.00 pm and 10.30 pm.

A public opinion poll carried out in the USA in January 1974 showed that more than one in ten of the people questioned claimed to have seen a UFO.

The UFO speed record is held by a saucer seen flying over South America in January 1977. Its speed was calculated to be about 28,000 kph - the same speed as an artificial satellite orbiting Earth.

In the Autumn of 1967, Canadian Maritime Command was alerted by an object bearing several coloured lights which was flying over the North Atlantic. It glided with a whistling noise into the sea. But when the search party arrived there was no sign of any debris floating in the water, and divers searching the sea bed could find no wreckage of any kind.

In the last 30 years over 100,000 people have reported UFO experiences.

On June 16, 1963, Paul Villa received a message from space. The creatures who contacted him had worked out how to use Earth radio and telephone systems and Paul Villa claims they had selected him to do some 'public-relations' work for them. They told him that if he went to a place 15 miles from Albuquerque, New Mexico, at 2.00 pm that day he



would be able to photograph their spacecraft as it landed. He did so, taking 7 pictures, and the photograph above is one of them. When the saucer landed, Paul Villa spent an hour and a half talking to the creatures which had contacted him. They were male and female, similar to humans but far more advanced, and "very beautiful".

They told him that they could travel faster than the speed of light, making the journey from their home in another galaxy in a very short time. Their purpose in contacting him was to inform the human race of their existence - but gradually, so that Earth people might get used to the idea of life on other worlds. The story is a good one, but it is probably not true. Photographic experts who have examined the pictures declare them to be fakes.

Imagine his surprise when a young Belgian miner looked out of his window and saw a UFO-naut collecting stones from his own back yard. The miner watched in amazement as the creature finished its task and walked towards the wall at the end of the yard. The miner expected the creature to climb the wall or vault over it, but it did neither. It simply walked up the side of the wall like a human spider, so that its body was level with the ground.

When it reached the top of the wall its body swung over until it was facing the ground on the other side. Then it disappeared from view. Shortly afterwards a UFO zoomed off into the sky.

UFO's have been reported from every country in the world. News of them flows in steadily at an average of 40 sightings every day.

In the early morning of June 17, 1957, a US Airforce RB 47 jet was chased by a UFO for well over 1,100 kilometres.

For an hour and a half, as they flew from Mississippi through Louisiana and Texas into Oklahoma, the 6-man crew attempted to outwit the UFO using the jet's complex electronic equipment. The most curious fact about the UFO was that it seemed to play 'hide and seek'. It was not simply that the crew could see it one minute and not the next - the UFO also vanished from the aircraft's radar screen, and from the ground control radar which was tracking it, only to re-appear moments later. This ought to be impossible. Perhaps the UFO was moving in and out of our universe like a stone bouncing across the surface of a pond.



14-year old Alan Smith took this extraordinary picture of a UFO on August 2, 1965, at Tulsa, Oklahoma, USA. The odd light grouping is unique in UFO sightings.

A dictionary of UFOlogy

Ufology is the name given to the subject of UFO's and everything connected with them. People who study it are called **Ufologists**. This dictionary includes words about space and UFOlogy which are not fully explained elsewhere in the book.

ALIEN Any creature unknown on Earth and therefore possibly from another world. It also refers to any suspected life in outer space.

ASTRONAUT Human space traveller. It comes from Latin and Greek words meaning 'star sailor.' Another word (usually used of Russian astronauts) is **cosmonaut**, meaning 'sailor of the universe'.

EXTRA-TERRESTRIAL Refers to anything which originates outside Earth, such as an alien creature.



FLYING SAUCER The popular descriptive name for a UFO. It was introduced by Kenneth Arnold when he described his own sighting in 1949, but it is also applied to UFO's which are not circular.

GALAXY Gigantic cluster of stars, of which there are millions throughout the Universe. Our Sun is in the Milky Way galaxy, which is about 100 million light years across.

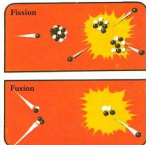
HUMANOID A creature resembling the human form, standing upright with two arms, two legs and a head.

INTERSTELLAR The space between the stars.

LASER A device for producing concentrated light rays in a very narrow beam. The letters stand for Light Amplification by Stimulated Emission of Radiation.

LIGHT YEAR The distance light travels in a year, 9,460,000 million kilometres. The speed of light is 299,270 kilometres per second.

METEOROID A lump of space debris. If a meteoroid hits Earth's atmosphere it usually burns up and is seen as a meteor. If it remains intact and hits the Earth itself, it is called a meteorite.



NUCLEAR REACTION Fission or fusion of atoms, as illustrated above. Fission means splitting the atoms. Fusion means merging two atoms into a single heavy atom. In both cases energy is given off in the form of light, heat and radioactivity. The Sun and all other stars burn by the fusion process. In controlled form, nuclear reactions can help generate electricity. They are also used as the source of power for atomic bombs.

ORBIT The curving path of one body as it moves around another, such as the Moon moving round the Earth.

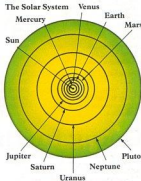
PHOTON A particle of light.

RADAR Device which uses radio signals to detect far-off objects. The signals are beamed out by a transmitter. They bounce off objects in their way and the returning 'echoes' are displayed as blips on a TV-like screen.

RADIATION The transmission of any form of energy, such as light, heat or radio waves.

RADIOACTIVITY Nuclear energy given off by some elements (for example, uranium). Too much radioactivity is highly dangerous to living things.

RADIO TELESCOPE A telescope, usually bowl shaped, designed to catch radio waves from space which are not detectable on ordinary optical telescopes.



SOLAR SYSTEM The Sun, with its family of nine planets moving in orbit around it, is called the solar system. Earth is the third closest planet to the Sun, as you can see from the diagram above. Other stars may be circled by planets and so have planetary systems of their own.

STAR A large body in space which generates its own light. The Sun is the closest star to Earth. All others are far away in the Milky Way and beyond.

UFO ENCOUNTER UFO expert Alan Hynck graded UFO sightings into three types of 'encounter.' The first is merely a sighting in the sky or on the ground. For the second, the UFO must react to the witness in some way, land or leave signs that it really existed. Encounters of the third kind involve the appearance of alien beings. Examples of all kinds appear on page 10.

UFONAUT Alien creature which might be one of the crew of a UFO.

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Going further

If you would like to keep in touch with the latest facts and theories about UFO's, there are clubs in many countries for you to join. Here are the names of some of them.

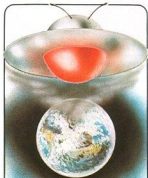
Australia
Center for UFO Studies,
Australian Co-Ordination Section
(ACOS), PO Box 546,
Gosford, NSW 2250

United Kingdom
Bufoza,
15 Freshwater Court,
Crawford Street,
London W1H 1HS

USA
International UFO Registry,
PO Box 1004,
Hammond, Indiana, 46325

Most clubs produce their own magazine, which is distributed to members, but there are also several independent magazines.

Space World
Palmer Publications, Inc., Amherst,
Wisconsin 54406, USA



A farm manager and his nephew claimed to have seen a UFO like this flying over Argentina in 1971.

Flying Saucer Review
FSR Publications, Ltd,
West Malling, Maidstone, Kent,
United Kingdom

Australian Flying Saucer Review
PO Box 43, Moorabbin,
Victoria 3184, Australia

Try writing to these addresses for further information.

The British UFO Documentation Centre,
c/o Alan Fossey, 10 Park Court,
Park Hall Road, London SE 21, England
Center for UFO Studies,
c/o Dr J. Allen Hynek, 924 Chicago
Avenue, Evanston, Illinois 60202, USA

There are many books about UFO's. Here are four good ones.

Close Encounters: the strange truth about UFOs by Alan West and David Jefferis (Arrow)
UFO's and Other Worlds by Peter Ryan (Kestrel)

Close Encounters of the Third Kind by Steven Spielberg (Sphere)

The Past is Human by Peter White (Angus and Robertson)

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