

MORE MOON MYSTERIES

NASA'S 'MISSING' MOON TAPES

NASA has a poor reputation for conservation of historic data. Last summer a batch of 'missing' tapes from the 1969 Moon landings were re-examined in order to determine whether the surface had warmed up since the Apollo missions. During Apollo 15 and 17 in 1971 and 1972, measurements were taken of the Moon's surface temperature. The data were stored on magnetic tape, but much of it was not properly archived and presumed lost. Starting in 2010, a team of academics spent eight years tracking down the tapes and performing data recovery on the decaying storage material in order to retrieve the information. The conclusion was that the astronauts themselves had disturbed the surface layer of the Moon, exposing the darker undersoil that absorbed more light from the Sun, so heating up the surface.

A further example of NASA's seeming carelessness with data tapes came in 2015. A batch of 325 magnetic tapes labelled as belonging to NASA was discovered in the basement of a dead man in Pennsylvania, along with two giant analogue computers. A scrap metal dealer clearing the house reported the find. According to the labels, at least some of the tapes related to earlier Pioneer missions, while others were data from weather satellites. NASA specialists spent five months analysing the tapes and attempting data recovery, before destroying the originals. It is unclear what data was recovered and whether it was of any significance, with NASA dismissing the tapes as merely back-up copies "of no intrinsic or informational value to the agency". How they, along with the computers, ended up in a Pennsylvania basement remains a mystery.

Worst of all for NASA was the 2006 admission that the agency had wiped the original tapes from the Apollo mission of July 1969. A search was mounted so the footage could be used in a new television programme, but it was discovered that the Apollo tapes were among the 200,000 magnetic storage tapes wiped and re-used by NASA, due to the then expensive nature of the tape (the same excuse was used for the junking of many British television programmes of the 1960s). Copies of the material were retrieved from the archives of CBS Television, while kinescopes (Super 8 film recordings from Australia) of the television coverage was located in NASA's Johnson Space Center vaults. Lowry Digital, better known

for restoring old Hollywood movies, was contracted to restore the available Apollo footage. This sparked a conspiracy theory that Hollywood continued to be involved in the falsifying of the Moon landing right into the 21st century. "The conspiracy theorists are going to believe what they are going to believe," noted Lowry Digital Chief Operating Officer Mike Inchalik.

MUSIC TO AN ASTRONAUT'S EARS

The crew of Apollo 10 – Gene Cernan, Tom Stafford, and John Young – heard what they dubbed 'Moon music' while travelling across the far side. For about an hour, the astronauts were out of contact with Earth, but instead they heard 'unearthly' sounds. Transcript of the astronauts' conversation remained classified in the NASA archives until 2008. "The music sounds 'outer-spacey', doesn't it," says one astronaut. "You hear that? That whistling sound? Well, that sure is weird music." After about an hour, the 'music' stopped. Prior to reconnecting with Mission Control at Houston, the astronauts discussed whether to mention the weird sounds they'd picked up over their radio. An audio recording of the flight reveals astronaut John Young asking: "Shall we tell them about it?" Gene Cernan then replies: "I don't know. We ought to think about it." The 'space music' remained a mystery until the Cassini spacecraft picked up similar sounds from Saturn. The sounds, picked up as radio waves, were caused by charged particles moving through Saturn's magnetic atmosphere – but the Moon lacks both atmosphere and magnetic field. The eventual explanation was put down to cross-interference from the Apollo spacecraft's own radio systems. While Stafford and Cernan were in the Lunar Module, Young remained in the Command

Module; both vehicles had their own active radio systems. The issue was never publicly discussed by the astronauts.

SPACESHIP MOON

The Hollow Earth theory is well-known, but what about the Hollow Moon? In 1970, two Russian scientists, Michael Vasin and Alexander Shcherbakov of the Soviet Academy of Sciences, published a paper titled "Is the Moon the Creation of Alien Intelligence?", which suggested that "The Moon is an artificial satellite put into orbit around the Earth by intelligent beings". Based on measurements of the depth of visible craters, they concluded the shell was only two-and-a-half miles (4km) thick and the interior was hollow. NASA scientists were reported as claiming that the Moon "rang like a bell" for hours after the deliberate crashing of Apollo 12's ascent stage, suggesting it might be hollow. Seismometers installed on the Moon by astronauts recorded 'moonquakes' between 1972 and 1977. The Moon's lesser density than Earth has been put forward as evidence both that it is hollow and as a cause of the moonquakes.

Essentially, in modern pop cultural terms, the Moon is the Death Star from the *Star Wars* films. The theory is that this spaceship Moon contains ancient extraterrestrials whose job it is to monitor the Earth and note the technological progress of humanity. It might also provide an explanation as to why the US abandoned the Moon missions in 1972 – were they warned away by its alien inhabitants?

The first mention of a hollow Moon actually comes in science fiction with HG Wells's 1901 novel *The First Men in the Moon*, so it is hardly a new idea. Others ran with it, including Edgar Rice Burroughs (in 1926's *The Moon Maid*), Isaac Asimov (in 1986's *Foundation and Earth*), and David Weber (in 2003's *Empire from the Ashes*, which postulates the Moon is an alien spaceship put into Earth orbit 50,000 years ago). Additionally, the hollow Moon is a favourite topic of former goalkeeper turned conspiracy guru David Icke, who believes that it is from there that reptilian aliens monitor and influence human thought. In an infamous episode of *Doctor Who* starring Peter Capaldi, the Moon was revealed to be a giant egg which then hatched into a huge 'space dragon'.