Ball Lightning Essay, Research Paper

Ball Lightning 59

Boules de Feu

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Another startling sighting – and certainly one of the most detailed and scientifically credible – comes from Professor Roger Jennison (Department of Electronics, University of Kent) concerning his experiences on board a late-night flight from New York to Washington in March 1963. He later wrote of his experiences in the November 1969 issue of Nature. Jennison states that the phenomenon occurred after the aircraft encountered a thunderstorm in which it was enveloped by a bright and audible electrical discharge. Some seconds later a glowing sphere some 20cm in diameter emerged from the pilot’s cabin and passed down the aircraft’s central aisle approximately 50cm from Jennison. The ball moved on a straight course the whole length of the aisle 75cm above the floor at a velocity relative to the aircraft of about 1.5 ms-1. It was blue-white in colour and its optical output amounted to about 5 to 10 Watts. Interestingly, no heat was felt when it passed close by and the limb darkening (like that of the Sun) gave it an almost solid appearance, indicating that it was optically opaque. No asymmetry could be seen in any dimension so it was impossible to determine whether or not it was spinning.

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In German, ball lightning is called kugelblitz.

Professor Jennison’s experience is one of the best ball lightning sightings on record. There are reports of this phenomenon going back at least to the Middle Ages, and maybe as far back as ancient Greece. Like meteorites before it, ball lightning is one of those phenomena that science has been reluctant to accept, with a few hold-outs remaining even today.

Ball lightning, or kugelblitz or boules de feu, sometimes appears high in the sky, almost always during a thunderstorm, and usually coincident with a normal cloud-to-ground lighting strike. It has been reported appear in homes and even airplanes. It’s always round, and is reported to be anywhere from a few centimeters to a meter or so in diameter. It has been variously reported as white, blue, yellow, red, orange, or green in color. It only lasts a short time, usually less than 5 seconds, but in a small number of cases it reportedly lasted over a minute. It may descend, hover, or move horizontally, but it has rarely been reported to rise. It sometimes has a strong odor, but not always. It either vanishes silently or with a loud explosion. There are a few purported photographs of ball lightning, but it’s difficult to determine what the photos actually depict. Almost all of the evidence for the phenomenon is anecdotal, consisting of sighting reports from a variety of witnesses.

There are many theories as to how ball lightning is formed, but none that satisfactorily explains its behavior. The most popular theory is that it is composed of a plasma contained within a magnetic field. Another theory is that it is a cloud of a common gas such as methane that has been ignited by a normal lightning strike. The latter theory, however, is at odds with its reported behavior. Clouds of ignited methane would rise from the ground, rather than drop from the sky.

Ball lightning has occasionally been used as an explanation for UFO sightings. As such, it has not been a very successful explanation because the reported behavior of ball lightning is not like that of reported UFOs, not to mention that very few UFO sightings occur during thunderstorms.

One of the most interesting things about ball lightning is its similarity to the UFO phenomenon. In both we have a phenomenon whose appearance we can’t predict and whose origin we can’t explain. Science has, however, reluctantly come to accept ball lightning. Not so with UFOs. What’s the difference?

Skeptic Robert Sheaffer briefly touches on the comparison between ball lightning and UFOs in his recent book, UFO Sightings: The Evidence. He does so, in the context of jealous phenomena. He begins by defining jealous phenomena as phenomena that exhibit “suspiciously careful or watchful” behavior in selecting where and to whom they will appear. He then explains that UFOs must be a “jealous” phenomenon because they appear only to small groups or to individuals, never flying over a crowded football game or a large city in broad daylight. He adds that UFOs appear only when there is a single photographer, never when there are several photographers present. He also adds that Jealous phenomena should not be confused with rare ones. A phenomenon that objectively exists, no matter how rare, will eventually be brought into the open. He says that ball lighting is not jealous, it is simply rare. Sheaffer is admittedly attempting to show in this chapter that jealous behavior is the earmark of a nonexistent phenomenon.

Do Sheaffer’s arguments hold water? Does he show that UFOs are “jealous” (and therefore nonexistent)and ball lighting simply rare? I think he makes several mistakes in his attempt to show this. First, he lumps all UFO sightings together, including sighting reports by pilots, meteorologists, and astronomers together with those of contactees, abductees, and UFO cultists. Having done this, he says:

Ball lightning is not reported to persist for many minutes, or even hours, as are UFOs, it is not reported to return repeatedly to the same favored individuals, as are UFOs, and it does not appear that there are fifteen million Americans who claim to have seen it – that is the number who have claimed to have seen UFOs. If ball lightning were reported as frequently as UFOs and had as many eager investigators hot on its trail, then it indeed would be remarkable that better evidence has not been obtained.

See the lumping together? If you really study UFO reports, you know that the vast majority of them are of very short duration – seconds or scant minutes, not hours. The majority of cases in the Bluebook “Unexplained” category did not involve “favored individuals” who had repeated sightings, but people who had one sighting. If you read the ball lightning sightings reports at the links below, you will see that some of those witnesses are “repeaters,” as well. Ball lightning does not have the allure to attract a cult following as do UFOs, but having a cult following doesn’t detract from the possibility of existence, as is the inference.

The main problem with Sheaffer’s analysis, however, is that he is comparing a natural phenomenon – ball lighting – with something that is supposed to be intelligently controlled – UFOs. Why shouldn’t UFOs, if they are intelligently controlled, exhibit anthropomorphic characteristics such as avoiding crowds and cities? Not that they always do so – I am reminded of a UFO that appeared to the audience of a crowded outdoor theater in China, and one that appeared over Beverly Hills, not to mention several that have appeared over military bases.

What if UFOs are both a rare and a jealous phenomenon? What if there is a core of real UFO sightings that are sightings of intelligently controlled craft whose pilots try to avoid appearing before large groups of people whenever possible?

http://ufos.about.com/science/ufos/library/weekly/aa041700a.htm?rnk=r2&terms=Ball+Lightning