

## Challenging the Paradigm

BRUCE MACCABEE

103 Woodside Ave, Thurmont, MD 21788

e-mail: brumac@compuserve.com

**Abstract**—During the last 30 years I have made several attempts to publish UFO-related articles in conventional science journals. Most of my papers or letters have been rejected. However, quite by luck, in my opinion, I was able to publish two short articles concerning the New Zealand sightings of December 1978 in the journal *Applied Optics*. This paper presents the story behind the publications.

**Keywords:** UFO—paradigm—New Zealand sightings—*Applied Optics*

### Introduction

In their recent article, “Challenging Dominant Physics Paradigms,” Campanario and Martin (2004) pointed out the difficulties in publishing information that conflicts with the accepted paradigm. In the case of UFO sightings, the conventional paradigm is that reports of UFOs are not reports of some new and novel phenomena. Instead, each sighting has a conventional explanation. That is, each sighting results from a mis-identification (failure by the witness and by the sighting investigator to correctly identify what was seen) or from a delusion (mental state of a witness) or from a hoax. Therefore it is not surprising to find that journal editors are biased in favor of articles that offer conventional explanations for UFO sightings, even if those conventional explanations conflict with some (or much) of the available information about the sightings.

Several times, beginning in 1974, I have “tangled” with editors over the publication of UFO articles in which I claimed that there are no conventional explanations for some sightings. Most of my articles have been rejected. This article presents the history behind my one success.

### Denting the Paradigm

The November 1, 1978, issue of the staid technical journal *Applied Optics*, a publication of the American Optical Society (OSA), had a startling cover and an astonishing article of an investigation into UFOs. So surprising was this that it was even featured in major news media, including the *CBS Evening News*. The cover photo showed a beetle impaled on a Tesla coil with corona around its antennae and other appendages. In the article, two entomologists advanced the theory that at

least some glowing night-time UFOs were electrified swarms of insects flying between electrically charged clouds and the ground (Callahan & Mankin, 1978). I call this the Buggy UFO Hypothesis (BUH). So convinced were Callahan and Mankin of the validity of their theory that they recommended that entomologists track UFO sightings to learn about the migrations of insect swarms. This is not the place for a discussion of the BUH itself, but it is necessary to mention the article because it sets the stage for what happened later.

I read the article and within the month submitted a letter to the editor in which I argued that the BUH was not a satisfactory theory for UFOs. The editor responded in early December in a positive way: he said my letter, perhaps with some modification, would be an acceptable response, but he wanted to wait several weeks to see if there were any other letters. Along with the publication of the chosen letter(s), he would include an editorial statement that said the discussion of the UFO topic was closed unless new optical phenomena were presented "in a scientific way." The editor stated that he didn't want *Applied Optics* to become a "stamping ground for the UFO believers who are 99 and 44/100ths percent kooks." There the matter rested for several months, and may have rested forever, if it weren't for a significant UFO event.

The year 1978, which is particularly noted for the October disappearance of pilot Frederick Valentich over the Bass Strait south of Melbourne, Australia, under suspiciously UFO-like conditions, ended with a UFO bang. During the early morning hours of December 31 (1:00–3:00 AM local time), there was a series of sightings of strangely behaving lights seen over the ocean and (apparently) detected on radar near the east coast of the South Island of New Zealand. The witnesses were on board a freighter aircraft flying about two miles above the ocean and east of the South Island. They included the experienced air crew (pilot, copilot), two TV news reporters (one from Australia and one from New Zealand), a cameraman with a professional 16-mm movie camera and color film, and a sound recordist. Two further witnesses to the events were radar operators at the Wellington Air Traffic Control Center. During the sightings, both the reporter and the air-traffic control-control-center made tape recordings of the events as they occurred, and the cameraman shot many minutes of movie film. After the sightings were over, the Australian reporter interviewed the captain, took the movie film to Australia, and incorporated it into a half-hour documentary on the sightings. The Australian reporter claimed this was the first movie film of UFOs and the TV company that employed him sold the immediate news rights to news organizations throughout the world at the "going rate" of \$50,000 for one showing.

The New Zealand sightings made a big splash during the next few days and weeks. They were featured in major newspapers and magazines and on TV throughout the world. During the *CBS Evening News* broadcast on January 1, 1979, anchorman Walter Cronkite devoted the last five minutes to a brief presentation of some of the film and an interview with Dr. J. Allen Hynek, who for many years had been the consultant in astronomy to the Air Force's Project Blue Book. Detailed information on the sightings can be found in books written

by the witnesses, one by the pilot (Startup & Illingworth, 1980) and another by the Australian reporter (Fogarty, 1982). A description and analysis of one of the major sighting events has been published by Maccabee (1987). Further information is available at my web site. At [http://brumac.8k.com/NEW\\_ZEALAND/NZSB.html](http://brumac.8k.com/NEW_ZEALAND/NZSB.html) there is a technical discussion of the sighting which is discussed below, including copies of the *Applied Optics* articles that resulted from this sighting. Another part of my web site, [http://brumac.8k.com/NEW\\_ZEALAND/NZFlashingLight.html](http://brumac.8k.com/NEW_ZEALAND/NZFlashingLight.html), provides further history and illustrations of another sighting (Maccabee, 1987) that occurred the same night.

The reaction to the claim of filming UFOs, interpreted as interplanetary vehicles, was immediate and intense. Consistent with the paradigm, skeptics from all over the world offered explanations based on conventional phenomena. These explanations ranged from the simply wrong ("unburned meteorites" proposed by Sir Bernard Lovell of Jodrell Bank Observatory in England) to the ridiculous ("light reflected from the breasts of mating mutton birds" by a New Zealand ornithologist). Other explanations reported in the news during the next several weeks suggested drug runners, light reflected from cabbages (!) and, yes, glowing insects were mentioned. In the first press report, a New Zealand astronomer was quoted as claiming he was 99% certain that the witnesses had seen Venus, given that it was rising in the morning on that day. When he learned that the sightings had occurred before Venus rose, he proposed Jupiter as the explanation. An atmospheric scientist proposed that the sightings were a mirage of distant lights from the Japanese squid fleet that was in the ocean about 150 miles east of the South Island (the squid fleet uses bright lights to lure squid to the surface; one squid boat could emit incandescent light from many 1,000- to 10,000-watt light bulbs, corresponding to as much as 200,000 watts of electrical power).

My investigation of these sightings began about a week after they occurred, when an Australian reporter brought the film to Washington, DC, for analysis by the National Committee on Aerial Phenomena (NICAP). As the NICAP analyst, I viewed the original film and talked with several of the witnesses by telephone. Then I went to New Zealand and Australia and talked to all the witnesses. After several months of concentrated effort (I took a month off from work), which involved hours of witness interviews and weeks of technical analysis, I concluded that none of the proposed explanations were valid. Examples of these analyses have been published (Maccabee, 1987) and are at the above-mentioned web sites. The analysis of one series of radar and simultaneous visual sightings is presented in the second half of another publication (Maccabee, 1999).

The conclusion that there was no conventional explanation was presented at a press conference in New York City in early March 1979. Although this received a small amount of press attention, including a short article in the *New York Times*, I wanted to publish the result in a scientific journal. The first to come to mind was *Nature*, which had published a short news story on the New Zealand sightings soon after they occurred. The news story featured several of

the suggested explanations which I now knew were wrong. In the middle of March, I sent *Nature* a short technical paper entitled, "Photometric Properties of an Unidentified Bright Object Seen off the Coast of New Zealand." In that paper I presented a calculation of the extreme brightness of the unidentified light that had been filmed northeast of Christchurch. The editor responded at the end of April with a rejection note. He wrote, "This is not because I have any preconceptions concerning what it is. It simply reflects a feeling I have had on reading and rereading your manuscript that the item of information you present, although fascinating, has to be part of a much larger survey that is presumably being conducted," to which my immediate mental response was something like this: "Yes. I am carrying out that 'larger survey' and here is a piece of it." Then the editor pointed out that there was "endless pressure on space" in *Nature*, which I interpreted as "take it elsewhere." Chalk one up to the paradigm.

About the time I sent off the short manuscript to *Nature*, I received another letter from the editor of *Applied Optics*. He wrote that he had contacted a "very senior man" in the Optical Society who had said that a response to the BUH should be allowed, provided there were no further articles on this subject "unless they presented new data involving optics." The editor wrote that no other response had been received and so my rebuttal of the BUH could be published after a few modifications. At the time I received his letter, I had not thought about the BUH for quite a while, so I put it aside while I waited for a response from *Nature*. However, I realized the brightness calculation I had sent to *Nature* was more directly related to the subject matter published by *Applied Optics*. Therefore, as soon as I received the rejection from *Nature* I revised the article and sent it to the editor of *Applied Optics* in early May 1979. I included a cover letter in which I wrote that, although this article did not respond directly to the BUH, nevertheless it was an indirect response (e.g., here is a sighting which the BUH cannot explain) and, furthermore, "this article contains some physical data about an unusual light source and, since the data are primarily of an optical nature, the article is suited to your journal."

Wonder of wonders, the editor accepted my argument. A few days after I sent my article, I received a hand-written note: "I am much more comfortable about the present manuscript than I was about the earlier one. I will show it to someone, but it is my feeling it is probably OK. I remember that event. . . (it was) shown on the Walter Cronkite news program. I watched this flickering, bouncing hand-held camera shot and I'm glad I don't have to try to explain it."

It was as if I had accomplished a "bait and switch" by offering a rebuttal to the BUH and then replacing it with a different type of UFO article. Of course I was delighted because, for the first time (as far as I know), a technical analysis of a particular UFO sighting would be published in a refereed journal. It was published in August (Maccabee, 1979; see [http://brumac.8k.com/NEW\\_ZEALAND/NZSB.html](http://brumac.8k.com/NEW_ZEALAND/NZSB.html)). By an unexpected stroke of luck I had won a skirmish against the paradigm. But the real battle was yet to take place.











