

The Legendary Cash-Landrum Case: Radiation Sickness from a Close Encounter?

Gary P. Posner

Abstract: One night in December 1980, Betty Cash (then age 51), her friend Vickie Landrum (57), and Vickie's grandson Colby (7), allegedly witnessed, at close range, a massive, hovering, diamond-shaped, porthole-encircled, fire-spewing object, which was soon to be escorted away by more than 20 military helicopters. This case's notoriety revolves primarily around Betty's saga, as she was more exposed to the object than the others and thereafter manifested the most significant illnesses, some of which have been attributed to "radiation sickness" from her UFO close encounter. However, the nature of the principals' medical signs and symptoms (and the absence of another) provide reason to seriously doubt, if not discount, the role of ionizing radiation. Thus, the reliability of the testimony not merely of the eyewitnesses, but of others who have contributed to Cash-Landrum's standing as *the* classic "UFO radiation" case, merits critical scrutiny.

Keywords: Cash-Landrum, UFO, Radiation

Background

Some forty years ago, aerospace journalist, UFO skeptic, and friend, Philip J. Klass, requested my assistance in investigating the then-one-year-old Cash-Landrum "UFO radiation" case. I was in my second year of medical practice as a general internist, with limited knowledge regarding radiation-induced illness. My efforts included textbook research and correspondence with, among others, the primary radiology consultant to the Mutual UFO Network (MUFON), the principal agency chronicling this case. Three years ago, I scanned much of my file's content and created a C-L section on my website at gposner.com/Cash-Landrum.html.¹ My contribution to this book is at the behest of its first-listed editor, whose invitation noted that C-L "is such an important case that it probably even influenced the inclusion of the study of UFO-related physiological effects in the recently approved Unidentified Aerial Phenomena (UAP) law in the U.S. National Defense Act."

The Eyewitnesses' Testimony to the U.S. Air Force

On August 17, 1981, Betty, Vickie, and Colby were interviewed jointly by three U.S. Air Force representatives at Bergstrom Air Force Base in Austin, Texas. The following narrative is derived from a transcript of that session.^[1]

Betty and Vickie believed the object to be not an alien spacecraft but an experimental U.S. governmental device. At the suggestion of ufologist Allan Hendry, Betty wrote to her two Texas U.S. Senators and received a response from Sen. Lloyd Bentsen directing her to Bergstrom AFB for assistance. Per her account, at about 21:15 on the night of December 29, 1980, with Vickie and Colby as passengers in her vehicle, a strange light was observed in the sky. As Betty turned the car onto a narrow country road between the Texas towns of New Caney and Huffman (roughly 30 or 40 km northeast of Houston), the object, which now "lit up the entire sky," suddenly descended "almost level with the treetops." They could not proceed further because

¹ All gposner.com URLs are case sensitive, as my website is hosted on a Linux server.

“fire was shooting out the bottom of it.” Inside the car, “the heat was so intense” that Betty exited the vehicle. From her vantage point in front of her car, she estimated the size of the craft to be “as large, if not larger, than a water tower.” She watched it for several minutes before retreating back into the vehicle, but the door handle was “so hot I couldn’t stand it with my bare hand, so I got the pocket of my leather jacket to open the car door.”

Once the object lifted off, Betty said “it was [still] so hot ... we were all burning up.” And within moments there were “helicopters completely around the object ... the [type with] two rotors. ... I counted twenty three. ... They had ‘United States Air Force’ [markings].” The copters and UFO eventually drifted away together, with the object emitting a “shrill beeping sound. ... It was ... deafening.” Betty estimated the duration of the event to have been “about 15 to 16, 17 minutes.” When asked to “draw ... a picture ... if it had a discernible shape, and just sign it and date it for me,” Betty sketched what she described as “a diamond.” Vickie added some streaks from the bottom point where she said “the fire was coming right down,” and further characterized the object as “kinda like a flat ... aluminum, I guess, [and] the inside of it looked dark.”

Betty insisted that she had been feeling fine prior to the incident, but within 30 minutes of the traumatic experience she began developing “blisters all over my head, my face, my back, my neck. I was burning ... from the inside out.” She reported prompt swelling of her lips and ears, areas of hair loss and, at the time of this interview, nearly eight months post-incident, continuing issues with upset stomach, diarrhea, fatigue, and severe headaches, among other symptoms.

Vickie recounted being outside of the car for “just a few minutes,” most of the time apparently only partially, with one arm “holding [Colby] in, and had my [other] arm up on the car,” resulting in it getting “burned.” She added that “blisters” on her arms continue to come and go. On the back of her left hand, one questioner pointed out “a bruise about the size of a quarter [and] kind of a deep purple,” about which Vickie explained, “Saturday we were out in the sun for quite a while, and the sun does it to me.” She said her hair started falling out “about a month after the incident” but had since regrown, though with a different texture. She said she initially “was sick [with] the diarrhea and everything,” but most of her ongoing symptoms seemingly involved her eyes, which she said had “started forming ... a film, like cataracts, except that my eyes was burned so bad that they teared for about three months.” She added that they still “feel just like they’ve got sand in them,” especially when she is out in the sun, and “my eye doctor said that there’s a possibility that within a year or year and a half that he’ll have to operate.”

Colby concurred with the timeframe of “about ... 15 to 20 minutes.” He said the object was “kinda yellowish-red” but was not asked and did not comment about its shape or having felt burning heat. Vickie described him as “screaming and crying,” yet when asked “[when] you saw it ... what did you feel like?” he replied, “I just ... [sat] there wondering what it was” and “didn’t feel nothing until I got up the next morning” with stomach pain and “runny” stool.

The Eyewitnesses’ Testimony to the Media

Through the years, numerous books, magazine articles and television programs have perpetuated the story of the Cash-Landrum “UFO radiation” incident. The July 9, 1998, “Close Encounters” episode of *The Unexplained*² may just be, based upon my own experience on another of this

² This series, which ran from 1996-2000, should not be confused with any newer one(s) with a similar name.

series' episodes, one of the more respectable efforts. On this program,^[2] Betty adds some flourishes to her Bergstrom AFB rendition. For example, when attempting to reenter the car, “I just grabbed the door handle, and when I did it just pulled all the meat off my hand” (at 21:29 of the video). And that night, “I went on to bed and I was so sick all night, upchucking. The next morning I woke up and there was big globs of hair on my pillow” (24:05). Dr. Bryan McClelland, a family practitioner who began treating Betty after her subsequent move to Alabama months after the incident (to be nearer her mother), offers, “The illness that she suffered three weeks after her exposure was an absolute classic radiation injury in which she lost skin, she lost hair on the exposed side. She then had diarrhea, vomiting, and all the illnesses you get [from ionizing radiation], and it was exactly on time” (25:01).

On the same show, Vickie explains that after the craft and helicopters “flew [away] slowly toward Houston” (at 22:08), about 13 km into the resumption of their drive home “there was [another?] whole bunch of [the big kind of] helicopters that were flying in with their searchlights on. They flew over us” (23:12). A photograph of what the narrator misidentifies as the “badly burned [hand of] *Betty Cash*” (23:26) shows an area resembling a dark purplish triangle on the back of Vickie’s left hand (a newspaper photo’s caption at 31:25 correctly names Vickie).



Photograph of Vickie’s left hand, as shown in numerous print publications and television shows, including *The Unexplained*

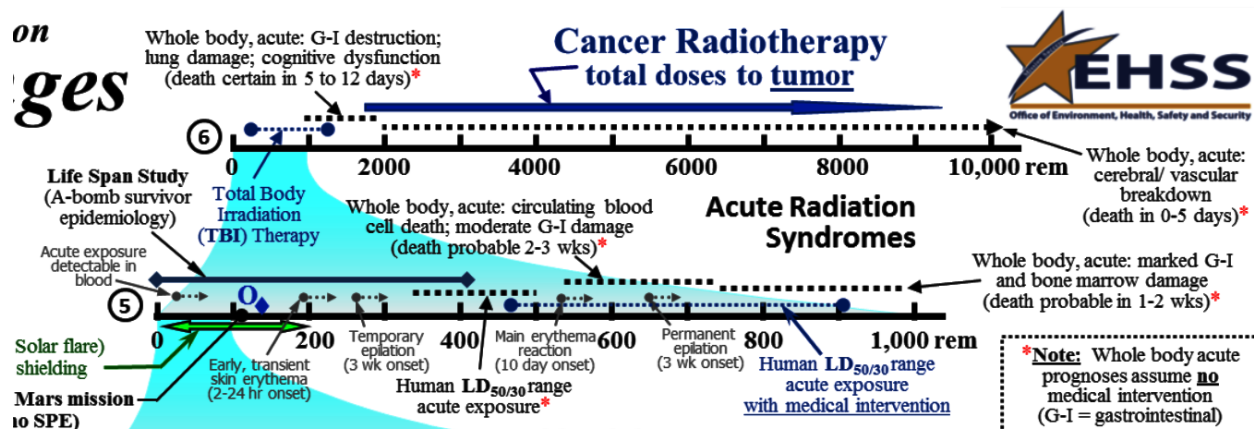
In 1985, HBO’s *America Undercover* documentary series devoted a portion of its hour-long episode “UFOs: What’s Going On?” to the Cash-Landrum case.^[3] Per Betty (at 40:23), “After they found out really what had happened, then they started ... treating us as *radioactive* burns. And since [then], I have had cancer.” The narrator immediately clarifies that “Betty’s hospital records do not explicitly state that she was treated for radioactive burns” but that she exhibited symptoms “similar to someone who might have been exposed to a radioactive element.”

Dose-Related Effects of Ionizing Radiation

Cash-Landrum’s notoriety as a “radiation” case rests primarily upon several reported medical effects allegedly caused by the witnesses’ exposure to the UFO: hair loss, acute skin burns with non-healing sore(s), and gastrointestinal complaints (particularly nausea and diarrhea). Within

weeks of receiving Phil Klass' request for assistance, I had compiled my preliminary findings regarding both the superficial and internal effects of excessive ionizing radiation. Though no two people or exposures are identical and expert opinions can somewhat differ, my sources indicated that temporary epilation (hair loss) requires, for a single exposure, about 300-400 rad of ionizing radiation. It takes 2-3 weeks for onset and, following a resting stage, hair begins to regrow in 1-3 months, gray or white in color but typically with its original texture.^[4,5] Regarding the skin, acute onset of erythema (redness) requires about 450 rad and should disappear within about three days; it would take exposure of greater than 1,000 rad to cause blistering and non-healing of sores.^[6] As for GI effects, while nausea and vomiting may be seen at far lower doses, diarrhea lasting more than a few days would require exposure of 1,000 rad.^[7]

In preparation of this chapter, I reviewed some additional resources to augment my originals from four decades ago. A December 2017 U.S. Department of Energy publication contains a graphic titled "Ionizing Radiation Dose Ranges (Rem)."^[8] Its timeline #5 confirms "Temporary epilation" to typically have a "3 wk onset" following a dosage of about 260 to 300 rem. Early (2-24-hour onset) transient skin erythema can occur from as little as 190 rem, while "Main erythema reactions" require about 530 rem, roughly the same minimal requirement for "circulating blood cell death [and] moderate G-I damage," with "death probable 2-3 wks." Without medical intervention, the LD50/30 (dose likely to be fatal to 50% of victims within 30 days) is roughly 340-500 rem.³



The relevant timeline (#5) from the above-cited December 2017 U.S. Department of Energy publication

On the U.S. Centers for Disease Control and Prevention (CDC) web page devoted to "Acute Radiation Syndrome," Table 1 implies that exposure in the 50-rad range should manifest in mild blood-related findings, and that a dose in the 600-rad range is required for any notable GI effects. Diarrhea continuing for more than a few days—if resulting from an acute exposure—would be severe and indicative of a full-blown GI syndrome requiring 1,000 or more rad, with death "within 2 weeks."^[9] The U.S. Atomic Energy Commission concurs that this level of whole-body irradiation leaves "the prospects of recovery ... so poor that therapy may be restricted largely to palliative measures," followed almost invariably by death "usually within ... 2 weeks."^[10]

³The differing units of measurement ("rad" vs. "rem") seen throughout this chapter are explained thusly by the U.S. Nuclear Regulatory Commission (see <https://tinyurl.com/CL-Nuclear>): "For practical purposes ... 1 rad (absorbed dose) = 1 rem or 1000 mrem (dose equivalent)."

MUFON's Investigation

The principal investigation of this case was conducted by the Mutual UFO Network. The December 1982 issue of its *MUFON UFO Journal* contains an article by Paul Stowe, MUFON's Research Specialist in Nuclear Technology.^[11] Stowe asserts that "the observers exhibited radiation sickness of varying severity as well as local skin burn." He notes that the photoelectric effect of *non-ionizing* radiation, such as ultraviolet light, could account for "the observed burn as well as the sensation of heat." But to account for "the [other/deeper] injuries ... it is apparent that a delivered exposure of between 200-300 rem occurred. ... [I]t is further assumed [to have been] gamma/X-ray emission." His article includes a table based on "data gathered by the [U.S.] Department of Defense" listing the observable effects of various ranges of exposure to such radiation. In it, blood abnormalities are noted to manifest at about 50 rem. The 200-300 rem column reads, "Radiation sickness with accompanying first instances of death occurring within 30 days." Further down, 300-450 rem represents the range considered to be LD50/30, and 600-900 rem is the LD100/30 range (100% lethal within 30 days' time).

Following Stowe's article, Peter Rank, M.D., a practicing radiologist in Madison, Wisconsin, and MUFON consultant, writes, "I would agree totally with Mr. Stowe's analysis," yet he parts with Stowe regarding both the assumption of deep/total-body exposure ("This is by no means clear") and the estimated 200-300 rem ("I do not believe that a general dosage level can be assigned"). Rank does concur that "both women had symptoms of radiation sickness," though he notes that "there were no well documented changes in the blood."^[12]

MUFON co-founder John Schuessler has researched and written extensively about the C-L case. His article in the July 1982 *MUFON Symposium Proceedings*^[13] states that Betty was "directly exposed" to the UFO for "5 to 10 minutes" and Vickie "3 to 5." By the time Betty arrived home shortly before 22:00, she already had "red blotches" on her face, and over the next four days her health "degraded ... eyes swelled closed, the red blotches became blisters of clear fluid, and she was weak with diarrhea and nausea." Vickie took Betty to the hospital, where she was admitted "as a burn patient," and over "the next several days [she] lost patches of skin on her face and about fifty percent of her hair fell out." The caption of a photo of Betty, depicting two areas of denuded scalp, reads, "Betty Cash, back of head showing approximately 50% loss of hair." Another of the article's accompanying images was the same hand photo shown earlier, its caption reading, "Vickie Landrum. A sore on the back of her left hand which has not healed."



The same photo of back of Betty's head as cited above, but a higher-quality image from a television program

In 1998, Schuessler published *The Cash-Landrum UFO Incident*, a book which, though largely anecdotal, contains passages that faithfully portray Betty's hospital records.^[14] According to his presentation (which in a couple of spots leaves me a bit hazy as to whether a date-unspecified event took place during her first hospitalization or her second), Betty was initially admitted as a burn patient to Parkway Hospital in Houston on January 2, 1981, four days after the UFO incident, with initial complaints of "swelling of the eyes, scalp, and face, along with a terrible headache," and was discharged on the 19th (p. 88). The consulting dermatologist, Dr. Solomon Brickman, noted areas of swelling and crusting of the scalp, face, and eyelids, which he diagnosed as cellulitis and treated with antibiotics and steroids (pp. 90-93). He made no mention of alopecia, nor did admitting physician Dr. V.B. Shenoy who, per Schuessler, "specifically noted that Betty had little, if any, hair loss" upon admission (p. 88). An EEG and CAT scan of the head were negative (p. 90), as were sinus x-rays, and neurologist Dr. K. Kumar concluded that her head pain was "most probably due to severe tension headache" (p. 104).

Betty was readmitted to Parkway on January 25th for similar complaints as well as diarrhea and alopecia, and remained hospitalized until February 9th. Detailed ophthalmologic findings by Dr. Joseph Darsey on January 26th indicated no significant abnormalities, though some small areas of residual red, dry, and scaly skin of the forehead and eyelids were seen. Her neurological exam on the 29th by Dr. Kumar was again unremarkable. Only upon this admission, nearly a month post-incident, were areas of alopecia noted, which Dr. Kumar described as "two large areas of complete hair loss on either side of the head in the parietotemporal region." Dr. Brickman referred to them, per Schuessler, as round spots within which were areas of black hair regrowth (not the more typical post-irradiation white or gray), and his clinical impression was "alopecia areata" (p. 93), an autoimmune condition sometimes triggered by emotional stress but unrelated to radiation exposure. This diagnosis was supported by scalp biopsy (p. 94), though Dr. Rank takes issue with the pathologist's interpretation of it (pp. 109-111).

Betty was hospitalized again, primarily for skin issues, from May 27th through June 1st of that year at Lloyd Nolan Hospital in Alabama. In addition to multiple other lesions common to almost anyone her age, Dr. Whittaker (no first name given, and also spelled "Wittaker" later in the book) noted areas of erythema, especially on the anterior and posterior aspects of the lower trunk and upper thighs, including the buttocks. He described many of them as "almost like a [round] ringworm-type lesion," and others as more irregular in shape (pp. 96-97). No definitive diagnosis was mentioned regarding the skin, but he did comment that her "chronic bowel problems" still persisted. She was hospitalized twice more between September 29th and October 17th for "chronic bronchitis and chronic obstructive pulmonary disease."

In Schuessler's words, "The effects of the radiation exposure were becoming more pronounced," so Betty was readmitted to Lloyd Nolan from November 26th to December 7th, her primary complaint being pain in her chest and left arm (p. 100). Her exam revealed a normal BP of 120/70, a "normal" chest x-ray, unchanged EKG, "no edema" of her legs, and no cardiac "rubs" often heard with pericarditis. (In a later, anecdotal chapter [p. 125], Schuessler says she was admitted on the 28th, had "swollen legs ... and low blood pressure," and that her doctor said she had "pericarditis ... secondary to radiation exposure.") After "2-3 days in CCU," a heart attack was ruled out. The consulting dermatologist noted several skin lesions of concern, given the patient's oral history of "radiation exposure," and, per Schuessler, the clinical impression was "radiation

dermatitis. She had biops[ies] of skin and [the] report was pending at the time of discharge.” When it became available (pp. 100-101), two of the specimens turned out to be seborrheic keratoses (waxy, superficial growths) and the third “hyperkeratotic epithelial hyperplasia” (a descriptive phrase, essentially translating to “thickened skin” like a callus). Both conditions are benign and extremely commonplace, and neither is caused by radiation, ionizing or not.

She returned to the hospital in March 1982 (p. 101) for more skin lesions (“same results as before”) and continuing chest and arm pains (“poor exercise tolerance”). On July 4, because “her problems were continuing to mount,” Betty underwent a bone marrow aspiration and biopsy, along with a standard CBC/blood count (pp. 101-102). The white cells and platelets in her blood were normal in number and appearance. Her red cells were slightly small (common, and typical of iron deficiency). The marrow studies confirmed a “marked decrease” of stored iron, but were otherwise normal and negative for any evidence of marrow damage due to ionizing radiation. Per Schuessler, “Betty continued to be hospitalized several times each year due to a combination of the aforementioned problems.”

Incongruity and Quandary

Skin blistering and non-healing of sores for at least 1½ years, if caused by ionizing radiation, should require an exposure sufficient to kill within a couple weeks—unless it is directed to only a small area (as in targeted radiation therapy) or, rather than deeply penetrating, is only of a superficial, skin-deep nature. If the UFO’s emitted radiation was superficial, how could it account for the deeper “radiation sickness” complaints of nausea, vomiting, diarrhea, and the rest? If penetrating, how could Betty have survived for 18 more years (to age 69) when enough radiation to cause, for example, diarrhea for more than a few days should kill in just a few more? (Vickie lived another 27 years to age 83, and Colby survives to this day.)

Dr. Rank’s aforementioned assertion that “both women had symptoms of radiation sickness,” while also recognizing that “there were no well documented changes in the blood,” creates a quandary, since the absence of such blood abnormalities indicates internal exposure of less than 50 rem, insufficient to cause the various symptoms of “radiation sickness.” This is one reason why, in his generous 1982-83 correspondence with me,^[15] Rank suggested I read *The Medical Basis for Radiation Accident Preparedness*, which he indicated “should answer all of your questions.” My hospital library obtained a copy for me, and though the book actually answered none of them, I did find interesting a discussion of a man in Japan who had suffered only a small dose of penetrating whole-body radiation despite several thousand rem locally to one hip. (I can’t recall, but I think a radioactive particle may have been trapped in a pants pocket.) But how would this sort of story relate to Betty, whose lack of blood abnormalities indicates deep exposure of less than 50 rem, yet whose “radiation sickness” would have required hundreds more?

Possible Hoax for Monetary Gain?

Philip Klass, whose prior investigations had revealed some of the most “classic” UFO cases to have been apparent hoaxes, wondered whether this incident might have a similar explanation. In a January 1982 letter to Richard Niemtow, M.D., a radiation oncologist who also (with Dr. Rank) consulted to MUFON on this case, Klass explained that “as a senior editor with *Aviation Week & Space Technology* magazine ... [which is sometimes] referred to as ‘Aviation Leak’

because of our publication of [sensitive] material ... I can assure you that during my nearly 30 years ... we have never received a ‘leak’ indicating that the U.S. Government knows anything more about UFOs than it has made public. Based on [our] excellent sources, I can assure you that IF the principals ... were indeed exposed to radiation, that it did not come from any ‘secret weapon’ ... [but rather] would represent powerful evidence to support UFOs as extraterrestrial vehicles. But my gut instincts suggest a more prosaic explanation.”^[16]

Later that year, Klass inquired to John Schuessler about the principals’ prior health and was told, “Several years [pre-incident], Mrs. Cash had some severe health problems, but had recovered.”^[17] It would be many more years before Schuessler would release Betty’s medical records revealing that prior cardiac surgery, but in July 1983 (and again three months later, after receiving no reply), Klass asked Schuessler, “Is it not true that Mrs. Cash had taken chemotherapy and/or ... radiation treatment for cancer prior to the date of the alleged UFO incident?” Schuessler’s brief reply, “Where did you get this information? It wasn’t from me,”^[18] denies only his awareness of the information’s source, not necessarily of its accuracy. On *The Unexplained*, Dr. McClelland states (at 26:00) that Betty was “economically devastated by the illness that she had after she was radiated” by the UFO and that “later she did get breast cancer and had mastectomies. ... She was uninsured.” In Betty’s words, “They’ve ruined my health. They’ve ruined my life. So what else is there that they can do other than kill me? And they probably would love to do that ... [but] I’m going to be around to fight just as long as there’s a fight left in me” (36:29).

As to whom “they” refers, toward the end of the interviews at Bergstrom, Betty asked the Air Force representatives, “Well, who is responsible for us being injured?” Vickie asserted that “it had to be something the government had up there ... and I intend to find it.” She also revealed that “I was hypnotized, I have the tape if [anyone wants] to hear the tape. ... I knew I wasn’t lying, and I did it because I wanted ... people to know I wasn’t lying.” The session was conducted in July 1981 by Dr. Leo Sprinkle,^[19] a psychologist known for his work with UFO “contactees.” A second session with Sprinkle was conducted at a TV studio and aired on an episode of ABC-TV’s *That’s Incredible!*, a series which, as described on its Wikipedia page, “featured people performing stunts and reenactments of allegedly paranormal events.”

Video of that November 16, 1981, TV program has proven elusive, but I had watched a rerun the following April and recorded the audio of the segment covering the C-L case (I did miss the first 90-or-so seconds). More probative to me than anything of value revealed by Vickie under this hypnosis (which was virtually nothing—listen from 6:53 to 11:10 of the audio)^[20] was a photograph shown of Betty’s skin. As memorialized in my correspondence (16 months post-viewing) with the *MUFON UFO Journal*’s “Critic’s Corner” columnist,^[21] I recalled observing “a number of round, sunburn-type lesions on her limbs [which looked like they] could be explained by UV light exposure.” I added that “a sunlamp would do,” but neglected to mention that she would have first covered her limbs with material containing round cutouts.

And returning to the matter of Betty’s “later” development of breast cancer, Klass’ initial letter to Schuessler asking specifically about any “prior” cancer treatment was dated July 28, 1983. Earlier that day, during a telephone conversation (almost certainly surreptitiously recorded, as I knew Klass’ habit to be) with Peter Gersten, a New York attorney and director of Citizens

Against UFO Secrecy, Klass' transcribed notes from that call indicate that he was told, "As far as Betty Cash is concerned, I think several months ago she had her right breast removed because of cancer and she is now receiving chemotherapy." When then asked about any *prior* history of cancer, Gersten's cryptically ambiguous response, "Well, none [*sic*] diagnosis, let's put it that way,"^[22] can justify inferring that she may have noted *something* on self-examination prior to her alleged UFO encounter and only much later was it evaluated and diagnosed as a malignancy.⁴

In pursuit of their quest for compensation for their injuries, Betty and Vickie had engaged Gersten^[23] to file a lawsuit against the U.S. government. As reported in the publication *Texas Monthly*, "The case dragged on in district court for several years and called upon the testimony of officials from NASA, the Air Force, and the Army and Navy, before being dismissed in 1986 because *no governmental agency owned or operated any aircraft fitting Cash and Landrum's description*" (emphasis added).^[24] Three years prior to the case's ultimate dismissal, the Air Force had informed Gersten that "The appeals of your clients' claims for personal injuries allegedly caused by an overflight of an unidentified flying object and unidentified helicopters on 29 December 1980 have been considered and denied."^[25] The letter goes on to state that the Air Force had uncovered "*no evidence of involvement by any military personnel, equipment or aircraft in this alleged incident*" (emphasis added).⁵ Betty and Vickie hired another attorney in 1990 to "reopen the case by showing government officials lied about [their] record-keeping" and to negotiate "the sale of his clients' movie rights,"^[26] but nothing came of either endeavor.

Discussion

The summa cum laude status of Cash-Landrum as a "UFO radiation" case rests not upon superficial burns of the sort that can be caused by the sun's UV rays or other sources of non-ionizing radiation, but upon symptoms—among them longstanding diarrhea—asccribed to "radiation sickness" resulting from penetrating, ionizing gamma/X-ray-type exposure. Yet, such irradiation, had it occurred, should have been lethal in a matter of days.

If this case were to be stripped of its "radiation" component, it would still qualify as a UFO close encounter and demand critical scrutiny. Should even one seeming whopper of a falsehood by a principal, such as vividly describing "big globs of hair" falling out within a few hours, justify labeling that person's UFO eyewitness testimony as unreliable? And what, if anything, can be inferred about the reliability of investigators' authentications of extraordinary sightings of, and physical injuries from, UFOs—whether thought to be extraterrestrial or (as in this case) not—absent unambiguously persuasive documentary evidence?

John Schuessler "wrote the book" on this case and, as co-founder of a pro-UFO organization, might be expected to interpret doubtful details in their most positive light. The same might be said of others who offer their expert services as consultants to such enterprises. For example, in Dr. Niemtow's 1983 *MUFON UFO Journal* article titled "Radiation UFO Injuries," when

⁴ Per Schuessler's book (p. 28), in early 1983 "lumps were found" (via radiography) in her right breast, followed by a right mastectomy (March 29), chemotherapy, and also a left mastectomy (June 23). There is no mention of when Betty may have first felt a lump, though a xeromammogram in early 1981 was interpreted as unremarkable (p. 94).

⁵ Schuessler's book does contain an anecdotal 1989 double-hearsay account (see gposner.com/CL-Pilot-Hearsay.pdf) of an unnamed alleged military pilot's participation in a multi-helicopter exercise remarkably similar to (including a huge, spark-throwing "diamond" UFO), and possibly at the very time and place of, the C-L principals' alleged sighting.

referencing the Cash-Landrum case's particulars as "reported very professionally by Mr. ... Schuessler" in an earlier article, Niemtow opines (with the caveat that "I never examined [the principals] or had access to their medical records") that "it would be feasible to assume that [they] might have been exposed to some type of ... ionizing radiation."^[27]

Ultimately, however, Dr. Niemtow appears to have decided otherwise. In a 1999 Internet posting, ufologist Brad Sparks, though believing that Betty Cash had "bravely endured tremendous [physical] suffering as a result of her unfortunate UFO encounter," delves into technical matters beyond those addressed in this paper to explain why he believes "ionizing radiation or 'radiation sickness'" must be rejected as the cause, instead suspecting exposure to a "chemical agent." He notes that "Radiation oncologist ... Dr. Richard Niemtow reviewed my findings and agreed that the symptoms did not match those expected for ionizing radiation syndrome."^[28] (My correspondence with Dr. Rank obviously had no such effect.)

UFO researcher and writer Curt Collins' blueblurrylines.com website is largely devoted to Cash-Landrum and is filled with historical documents and other invaluable information (including a detailed report^[29] of Betty and Vickie's exploitation by some notable "myth"makers). In a November 2013 posting,^[30] his link beginning with the words "A Preliminary Report" leads to a large pdf file, the first page of which is a July 1981 handwritten/signed memo by John Schuessler documenting a phone conversation during which Dr. Niemtow was already opining that the skin issues, as reported, seemed compatible with "an exposure to a chemical substance rather than radiation." Pages 3-7 of that file consist of a letter to Schuessler written three months earlier by Dr. Rank detailing why he, however, felt it "safe to conclude, at this time, that Betty and Vicki[e] sustained radiation damage," though confined to "the skin and the immediate subcutaneous area" with the exposure "not sufficiently [penetrating] to cause sy[s]temic signs and symptoms" (blood abnormalities, nausea, vomiting, diarrhea, etc.). Rank added, "I think it is important to assure Betty that on the basis of the medical information you have provided me, that there are no signs of serious injury to date. You may also reassure Vicki[e] that her cataract was probably a pre-existing condition and not necessarily related to the incident."

Pages 8-18 of the file contain an April 1981 analysis of the case by Allan Hendry, chief investigator for the J. Allen Hynek Center for UFO Studies and author of *The UFO Handbook: A Guide to Investigating, Evaluating and Reporting UFO Sightings*, a book widely acclaimed by leading UFO proponents and skeptics alike for its thoroughness and objectivity. Collins describes Hendry's 11-page analysis as "one of the most valuable pieces of evidence in the case," as it was based largely upon "extremely rare early interview[s] with the witnesses before the case became subject to pollution by manipulation and rumors." Several items of particular relevance to witness reliability:

- Betty tells Hendry that as they approached the UFO, "It killed the motor in the car!" (a phenomenon not uncommonly reported with close encounters). Hendry was "surprised at her new portrayal," since Betty had been telling others, including John Schuessler, that she had turned the engine off herself. When further pressed by Hendry, she continued to insist that "It just quit on its own. ... I was beginning to wonder, 'What if we can't get out of here?'" (pp. 9-10 of the pdf file). Hendry thought this to be likely just a "glitch in this recent retelling," though "Schuessler acknowledges [also] being disturbed about this discrepancy,"

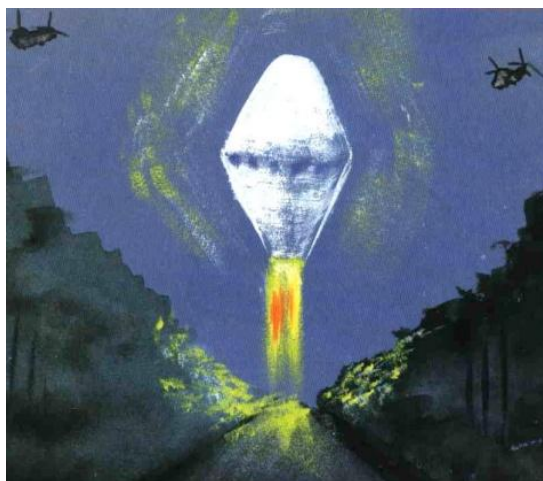
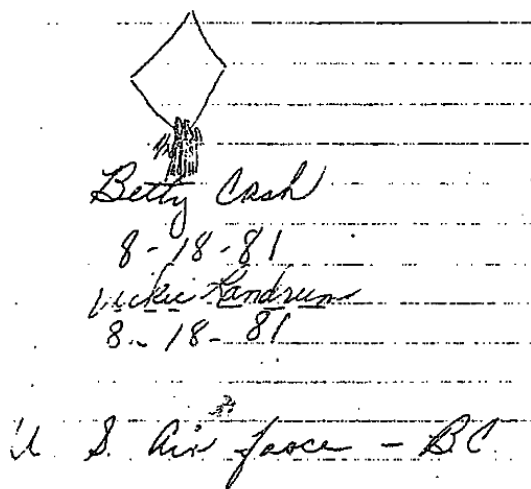
and it would be repeated by Betty during the Bergstrom AFB interview later that year: “I had not killed the motor on the car, I had put it [in] park. The radio was playing on low, but the car completely went dead. I mean, it was like somebody had turned a switch off.”

- Vickie tells Hendry that she didn’t seek medical attention for her injuries “because she didn’t have the money.” He found it “puzzling,” however, that “she continued to use [this] excuse” even after agreeing that “her health insurance would cover the costs” (pp. 13-14).
- Despite the blinding light, the deafening noise, and a helicopter swarm and diamond-shaped UFO the size of a water tower flying off together toward Houston, Hendry could find scant evidence of any corroborating witnesses. “The tabloid coverage ... mentioned one seemingly independent witness” [along with her son and his wife] but they “apparently don’t want to talk about it.” And “a news broadcast arranged by MUFON ... has netted at least one other witness” (p. 14).
- Hendry’s attempts to confirm the helicopter story came up empty. But he quotes a Mr. Nidever from the Army Guard Unit at Ellington Air Force Base in Houston as telling him, “We had a UFO sighting ... [not a few months ago when the C-L incident occurred but] about two years ago. ... They had a helicopter out there. ... Mr. Culverson (with the Army Guard) was involved in that” (pp. 15-16). John Schuessler, in the September 1983 *MUFON UFO Journal*, discusses a public twin-rotor helicopter demonstration event held not far from the Landrums’ home on April 30, 1981 (four months after C-L), which Vickie and Colby attended.^[31] The pilot was identified by Schuessler as Willy Culberson (note the similarity to “Culverson,” though no first name was provided by Hendry), and when approached by Vickie and asked if he had been involved in any previous nearby flights, “He referred to the December UFO event and said he and others had been called out because of the UFO and were there. When Vickie said she was one of the people hurt in that incident, Culberson beat a hasty retreat. Later, he denied via a telephone call [from Schuessler] having been involved.” Per Collins, who devotes another page of his website to this mix-up of UFO incidents, “Based on the evidence, it seems that the pilot mentioned [his] UFO case. Vickie, in her excitement, made an overzealous mistaken connection [to *her* case two years later]. Emotion and the inattention of the investigator [i.e., Schuessler, in his 1983 article, by not recognizing the name similarity in Hendry’s 1981 report] carried the story from there. *The pilot’s [truthful] denial was the foundation of the charges of [a U.S. government] cover-up*” (emphasis added).^[32]
- Schuessler claims to have been led, by Betty and Vickie independently of each other, “to the very place” where they all were able to observe “the roadway that was burned and the trees that were burned” by the UFO’s flames (see *The Unexplained*, beginning at 29:30). Hendry describes a similar expedition (the same one?) with Vickie and Colby, during which Schuessler associate Alan Holt had paced off the estimated distance between Betty’s parked car and the UFO (about 40 m.) and measured the treetop level to ascertain how high the object had been hovering. Though making no mention either way of burned trees, Hendry’s report does note that “later examination showed no [burn] marks on the pavement” (p. 10).

And in a search for evidence of any residual ambient radiation left behind by the UFO, on September 16, 1981, two representatives from the Texas Department of Health surveyed the stretch of road encompassing the site of the alleged incident. Despite making three passes while “following the route [Betty] took” and also gathering three soil samples along the way, “No significant deviations from background radiation were noted.”^[33]

Conclusion: Did The Eyewitnesses Even “See” What They Saw?

Aside from whether or not they were truly irradiated by a UFO, the eyewitnesses’ testimony regarding the most basic aspect of their *sighting*—what the alleged object actually *looked* like—appears utterly unreliable. I refer the reader to Curt Collins’ comprehensive analysis, originally published in the February 2014 issue of *UFO Today* magazine and more recently reproduced (with additional illustrations) on his website.^[34] When queried in 1985 about the portholes and/or lights encircling the object, which are depicted in perhaps all of its subsequent artistic renderings—including the one by Schuessler’s wife Kathy on the cover of his 1998 book—Betty denied having seen or reported any such detail. But of far more significance is the hallmark “diamond” shape—a most uncommon contour that almost certainly defines this celebrated UFO in the mind of anyone familiar with the Cash-Landrum case.



Left: Drawing at Bergstrom AFB by Betty Cash and Vickie Landrum⁶
(Bergstrom interview transcript indicates date to have been August 17)
Right: Illustration by Schuessler’s wife Kathy, used on cover of his 1998 book

During their August 1981 interview at Bergstrom Air Force Base, the signed drawing by Betty and Vickie affirmed their agreement regarding the shape of the craft they had witnessed. However, as early as February 1st of that year, in a transcribed audio recording, Betty stated, “We could not get up close enough to detect what the figure was. Or I couldn’t at least, the lights were too bright.” Several days later, she added in a handwritten narrative that Vickie “said the light was [also] too bright for her to see very much of the figure.” And as revealed by Vickie in her own February 1st recorded account, “Colby swore it looked like a big diamond. I couldn’t tell.”^[35]

⁶ See tinyurl.com/CL-Bergstrom-Drawing, p. 78. Pages 46-81 consist of a 36-page file released by the U.S. Air Force on August 22, 1983, to reporter Billy Cox in response to his Freedom of Information Act (FOIA) request. Also, “Vickie” is misspelled “Vicki” in the text (though not in the title) of the Bergstrom interview transcript.

So what are we to conclude with regard to the reliability of these UFO witnesses' testimony? Despite Betty and Vickie's signed drawing for the U.S. Air Force, was the only principal to have discerned the alleged object's distinctive shape actually a seven-year-old child who may have had the least opportunity of the three to observe it? Do the official hospital records confirm any of Betty's numerous health problems as having been caused by exposure to ionizing radiation? Have significant details of her ordeal been embellished and even contradicted in retellings? Have John Schuessler et al. met their burden of providing compelling evidence that the prevailing narrative of this UFO close encounter and its injurious aftermath, which occupies a hallowed spot in the annals of ufology, is historically sound? Or, as I believe, are there myriad reasons for skepticism of virtually every aspect of the legendary Cash-Landrum case?

Acknowledgments: An e-mail query three years ago from Curt Collins regarding my 1982-83 investigation of this fascinating case prompted me to create my own Cash-Landrum web page. His replies to my e-mails during preparation of this chapter were always not only swift but extremely helpful, and his review of an early draft, which I had foolishly thought might be the final one, was of immense value.

References (all web articles accessed on December 14, 2022)

1. Transcript of interviews of Betty Cash, Vickie Landrum, and Colby Landrum at Bergstrom Air Force Base, Austin, Texas, August 17, 1981. <https://tinyurl.com/CL-Bergstrom>
2. *The Unexplained*, Episode titled "Close Encounters." Towers Productions, A&E Network, July 9, 1998. Video of a History Channel rerun can be viewed at: <https://tinyurl.com/CL-Unexplained>
3. *America Undercover*, Episode titled "UFOs: What's Going On?" Robert Guenette Productions, HBO Network, September 10, 1985. Video can be viewed at: <https://tinyurl.com/CL-Undercover>
4. Fitzpatrick, T.B. (Editor). *Dermatology in General Medicine*. New York: McGraw Hill, 1971, p. 1038.
5. Prasad, Kedar N. *Human Radiation Biology*. Hagerstown, Maryland: Harper & Row (Medical Department), 1974, p. 241.
6. Fitzpatrick, pp. 1037-1038.
7. Hall, Eric J. *Radiobiology for the Radiologist*. Hagerstown, Maryland: Harper & Row (Medical Department), 1973, p. 202.
8. U.S. Department of Energy Office of Environment, Health, Safety and Security. *Information Brief*. December 2017, p. 5. <https://tinyurl.com/CL-Energy>
9. U.S. Centers for Disease Control and Prevention. *Acute Radiation Syndrome: A Fact Sheet for Clinicians*. Web page last updated April 4, 2018. <https://tinyurl.com/CL-CDC-Radiation>
10. Glasstone, Samuel (Editor). *The Effects of Nuclear Weapons (Revised Edition)*. U.S. Atomic Energy Commission, 1962, pp. 590, 595. <https://tinyurl.com/CL-AEC-Radiation>
11. Stowe, Paul. "Technical Review of Radiation Evidence in Cash-Landrum Case." *MUFON UFO Journal*. December 1982, pp. 8-9. <https://gpposner.com/CL-Stowe.pdf>
12. Rank, Peter. "Comments on Stowe Analysis." *MUFON UFO Journal*. December 1982, p. 9. <https://gpposner.com/CL-Stowe.pdf>
13. Schuessler, John F. "Radiation Sickness Caused by UFOs." *MUFON Symposium Proceedings*. July 2-4, 1982, pp. 50-64.

14. Schuessler, John F. *The Cash-Landrum UFO Incident*. La Porte, Texas: Geo Graphics Printing Co., 1998, pp. 88-112, 119-126, 225-230.
https://gpposner.com/CL-Schuessler_book-1.pdf, ... -2.pdf, ... -3.pdf, and ... -4.pdf
15. Personal correspondence with Dr. Peter Rank, 1982-83.
<https://gpposner.com/CL-Posner-Rank-1.pdf>, ... -2.pdf, ... -3.pdf, and ... -4.pdf
16. Letter from Philip J. Klass to Dr. Richard C. Niemtzw, January 2, 1982.
<https://gpposner.com/CL-Klass-Niem-1982.pdf>
17. Letters from Philip J. Klass to John F. Schuessler, 1982-83, p. 2. <https://gpposner.com/CL-Klass-Schuessler.pdf>
18. *Ibid.*, p. 3
19. Collins, Curt. "The Cash-Landrum UFO Case Document Collection." Internet posting, October 3, 2019. <https://www.blueblurrylines.com/2019/10>
20. *That's Incredible!* ABC-TV, November 16, 1981. The Cash-Landrum segment (missing the first approx. 90 seconds) can be heard at <https://gpposner.com/CL-audio.mp3>
21. Personal correspondence with Robert Wanderer, August 6, 1983. <https://gpposner.com/CL-Wanderer.pdf>
22. Notes from Philip J. Klass regarding his telephone conversation with Peter Gersten, July 28, 1983. <https://gpposner.com/CL-Klass-Gersten.pdf>
23. *America Undercover* (at 41:10).
24. Colloff, Pamela. "Close Encounters of the Lone Star Kind." *Texas Monthly*. December 31, 1969. <https://tinyurl.com/CL-Texas-Monthly>
25. Letter from Col. Charles M. Stewart, Department of the U.S. Air Force, to Peter A. Gersten, September 2, 1983. <https://gpposner.com/CL-USAF-Gersten.pdf>
26. Horswell, Cindy. "Twice burned, not shy: Stung by radiation, ridicule, trio stick to UFO story." *Houston Chronicle*, September 15, 1991, pp. 1-2. <https://gpposner.com/CL-Houston-Chronicle.pdf>
27. Niemtzw, Richard C. "Radiation UFO Injuries." *MUFON UFO Journal*. January 1983, p. 14.
28. Sparks, Brad. "Cash-Landrum: NOT Ionizing Radiation." Internet posting, January 1999. <https://tinyurl.com/CL-Sparks-1999>
29. Collins, Curt. "Cash-Landrum UFO Disinformation: Rick Doty & Bill Moore." Internet posting, June 22, 2022. <https://tinyurl.com/CL-Collins-Doty-Moore>
30. _____. "Report on the Cash/Landrum New Caney CEII Case ..." Internet posting, November 19, 2013. <https://tinyurl.com/CL-Collins-Report>
31. Schuessler, John F. "Cash-Landrum Case Investigation of Helicopter Activity." *MUFON UFO Journal*. September 1983, p. 5.
32. Collins, Curt. "Exonerating the Helicopter Pilot." Internet posting, May 16, 2013. <https://tinyurl.com/CL-Collins-Pilot>
33. Texas Department of Health interoffice report by Russ Meyer, September 28, 1981, pp. 17-18. <https://tinyurl.com/CL-TDHealth>
34. Collins, Curt. "The Cash-Landrum UFO: The True Picture." Internet posting, April 18, 2020. <https://tinyurl.com/CL-Collins-Picture>
35. Schuessler, 1998, pp. 39-40, 42, 253. https://gpposner.com/CL-Schuessler_book-5.pdf

Note: All gpposner.com URLs are case sensitive, as my website is hosted on a Linux server.