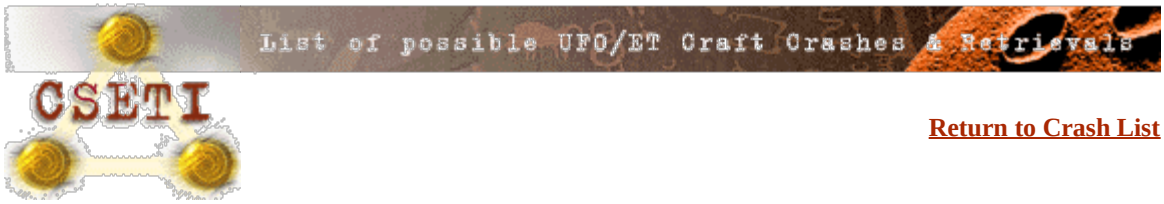

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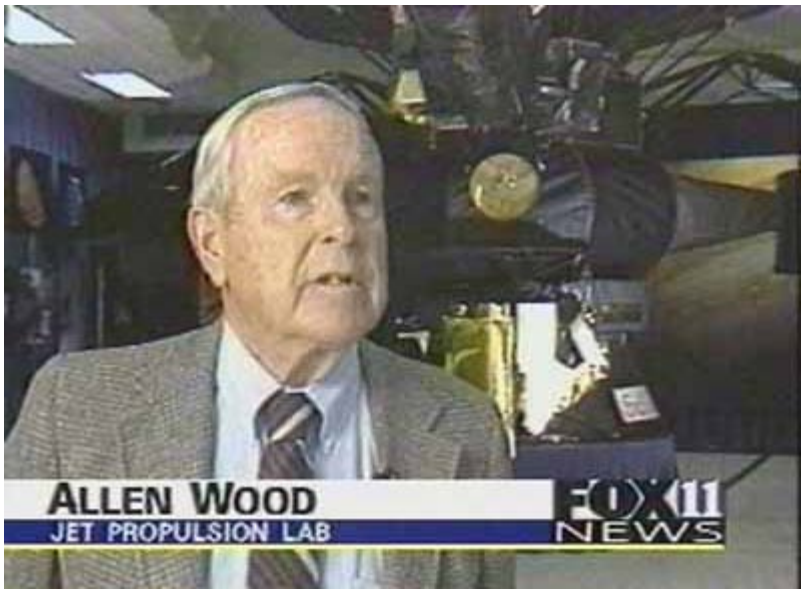


"There was a bright, bright, flash, and then it changed colors down to oranges and reds and greens and disappeared over the top of the mountain - I'm right close to the mountain, so I didn't see it for very long and after it got over the mountain, there was a glow, a flash, over the horizon and I thought, Whoa, there goes **Edwards Air Force Base**".

Those words from Allen Wood, a senior JPL employee at Pasadena, Ca, during an interview the next day by Fox TV News, was one of many confirmations that something had gone seriously wrong the night of October 3rd, 1996.

Pasadena, Ca

That was the night that several spectacular green flashes in the skies had been observed within several hours all over the South West.

Fire personnel were looking for a plane crash in the Los Angeles area.

"A woman on the phone with CNN live from Arizona said she saw a light in the sky that was green, turned bright white, and then appeared to CRASH somewhere over the mountains.

"Next they went to another phone call with a guy from Bakersfield California where the light was also visible. I think he was a highway patrol officer. They received many calls from people claiming to have seen a bright light, green or white, who reported it as a plane crash. They are sending police to investigate the area where the crash was reported, but they haven't found anything yet."

This from someone who was watching CNN at the time.

Another correspondent in Colorado Springs wrote:

"I heard a report on NPR's "Morning Edition", Fri Oct 4 1996 about it -- the thing was seen from California to New Mexico. A source at some observatory was quoted as saying it was something burning up in the atmosphere, either a meteor or some "space debris" dropping out of orbit."

But an astute observer nixes this theory:

"I saw a copy of your recent posting on this. An additional reason why it wouldn't likely have been space junk burning up is the east-to-west trajectory the news reports gave for it. Satellites, as you may know, in order to orbit the center of the earth have to move in a direction that deviates from straight east-west by an angle at least as great as the observer's latitude.

Space junk would follow this rule, too. So the 30-35 degrees north latitude may be too great a deviation to have called it a westward moving satellite. You'd think that they'd be able to deduce a more precise direction of travel if it had been a meteorite or space junk."

One memorable sequence shown on most national TV stations from an ABC cameraman in El Paso, Texas, showed in excess of 13 iridescent objects flying slowly in formation over a High School Football game. Flying enigmatically in a formation that resembled the Pleiades star cluster.

And if there had been any doubts as to whether or not these were natural occurrences, the sight of the Establishment clumsily wheeling out the damage containment team with all the subtlety of a Teutonic Joke confirmed the familiar sight of a coverup in progress.

First off, as the phones were ringing off the hook, it was necessary to kill the media frenzy, so by 9 am October 4th, CNN had already dropped the matter, and the "natural explanations" were being touted by one "expert" after another being wheeled in front of the cameras.

"Oh what a bolide!" trumpeted a thread in the Internet astronomy newsgroups, proffering a conventional explanation.

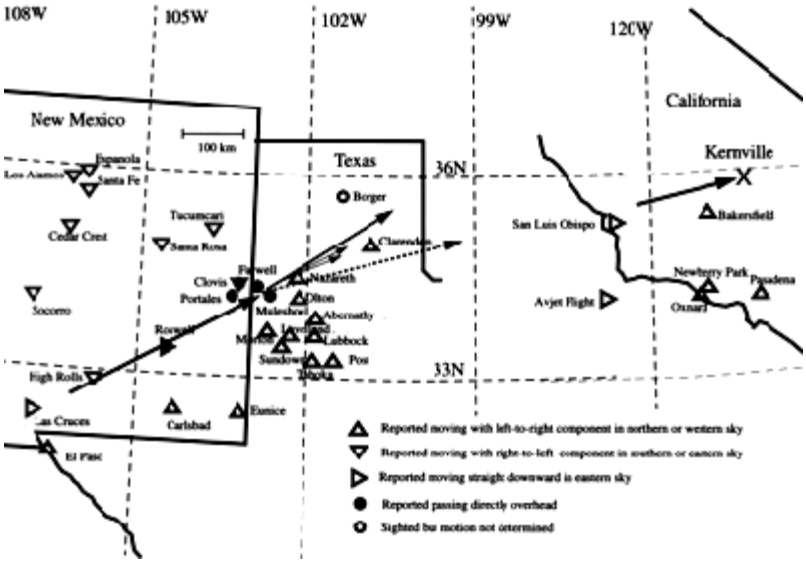
Meanwhile, back on the ranch, NORAD knew nothing.

I personally talked to Lt. Col. Planalp, who claimed that NORAD had seen nothing, and everyone else calling about the incident drew a blank there as well. Reassuring that as blind as they claimed to be, this was not a Soviet First Strike or the opening shot in War of the Worlds.

So the "Magic Bullet" theory was launched (a la Kennedy assassination). For the first time in history a meteor had supposedly been observed entering the Earth's atmosphere (in Texas, where it was filmed), then skipping out of the atmosphere, orbiting the Earth, and then re-entering it - this time over California, where it apparently crashed at multiple locations.

Mark Boslough of Sandia Labs' Computational Physics and Mechanics Dept., and UCLA Astronomer John Wasson were tasked with selling this one.

The only problem with this was that it did not square with the observations of the lay observers.



Original official meteor path

Ron Baalke wrote:

"You're forgetting that this "meteorite" entered into the Earth's atmosphere twice. The first time through, it was seen by people in Arizona and New Mexico. It went through Earth's atmosphere back out into space, and looped back around and entered Earth's atmosphere a second time and for good."

"I wasn't aware of that. But I'm still confused: According to CalTech's seismology data, it was traveling east-northeast when in fell to ground."

"But if it had just come over Arizona and New Mexico, how could it be heading east when it fell over California? And I thought all the reports were of it traveling west to east, putting it over Arizona and New Mexico *after* California, not before. Me no comprende."

CalTech's seismology department in the form of the familiar media figure of Dr. Kate Hutton had been brought in to shore up the buttresses, offering a $5,000 reward for the recovery of the "meteor". Unfortunately they were on a different script, pinpointing the crash site in a conveniently remote area in the Rose Valley Area near Little Lake, California. The reward is still unclaimed.

Steve Schoner of the American Meteorite Survey weighed in with a blistering attack:

"I have been following this thread, both here and elsewhere."

"So what if seismographs recorded sonic booms produced by the fireball. These sound waves were generated by a hypersonic piece of space rock 20 to 30 miles above the earth, and those waves will travel hundreds of miles in every direction from where they first originated to where the source stopped

producing them. Just because stations recorded sound waves from the ground does not mean that the meteorites fell there."

"Next time you hear a sonic boom, look for the plane that caused it. Usually it will be quite a ways farther in the flight path than from were you heard the boom. The same is true for bolides. Even if they end, the sonic boom, conical in shape will continue to travel in the direction in which the bolide was traveling. So, if you were expecting to find meteorites by that alone, you probably will be many miles away from where they actually fell. Sonic booms from fireballs can also be *pushed* or distorted by air currents, especially the jet stream. Meteorites falling to the ground can also be pushed by such currents, so that they would be found quite a ways from where they would otherwise fall."

"I have spent some time in the Little Lake area, and I am convinced that samples of this meteorite will not be found where the seismic (sound) data implies. What is important in recovering samples is to determine where the fireball phase ended in the atmosphere, how high it was at the time, and whether or not it fragmented at the end of its luminous phase. Once that spot is determined within a mile over specific topography, the meteorite fragments, if any, will usually be found a few miles downrange of that point. Even then, wind currents that were active that day would have to be taken into account to increase the chances of recovery."

"These sonic booms that everyone seems to be counting on do not indicate where fragments may have fallen, but instead indicate that the mass that produced them entered the lower reaches of the atmosphere (10 - 25 miles). Unless Caltech seismologists can say that their instruments actually picked up the impacts of the fragments themselves, I would not put too much stock in their predictions as to where the meteorites actually fell."

"That can be determined only by extensive field work involving interviews of actual witnesses that observed the fireball in its final stages."

Bob Thomas, the ABC cameraman in El Paso told me

"There was no way that it was a meteor because I was able to observe it for several seconds before deciding to reorient my heavy Betacam camera and still shoot four seconds of video".

But wait, by October 30th 1996 things had died down, and there are professional reputations to be salvaged.

"The fireball that was seen in New Mexico was seen 104 minutes before the one in California, and they were observed to be on the same trajectory. [Or at least as close as we can tell from the observations that were made.] It just works out that 104 minutes is just about the right amount of time for it to have

orbited the Earth, and California is about the right amount west of New Mexico for it to have been the same object. We will probably never know for sure. It may well have been two separate objects."

Said CalTech's Stan Schwarz, hammering the first nails into the coffin of the "Magic Bullet" theory.

Privately, Mark Boslough also confirmed to me that they were backing away from the Magic Bullet scenario. This from a scientist who was able to pinpoint with precision accuracy the impaction of the Shoemaker-Levy 9 comet into Jupiter's atmosphere, and who has the use of Sandia's new Intel teraflops supercomputer (trillion operations per second) - shortly to become the world's most powerful supercomputer.

And at year end in December 1996, eschewing the requisite scientific illusion of papal infallibility, Los Alamos Labs' Doug ReVelle came up with a glowing resume of their achievements for the year - the one problem area buried at the end of the report being the events of October 3rd.

"There are a number of questions left to be answered about the Oct. 3 fireballs," he said, "and there are some things which don't quite add up. You know, I'm not really sure what was happening in the sky that night."

So what actually happened, and how many objects were there?

Tough call at the time of writing - especially given the sea of disinformation that was disseminated.

Multiple objects flying in a tight formation clearly overflew El Paso, Tx and were caught on video. Whether or not they actually crashed is open to conjecture. And if they did, the location is not known at this time.

One object appeared to crash in Simi Valley, which is covered in a separate report.

Another appeared to crash in the vicinity of Edwards AFB.

Edwards AFB

And it is still an open question as to how many other crashes there were.

Maybe the whole thing was a Star Wars weapons test that went out of control. Or maybe they got lucky and bagged a squadron of ET craft with directed energy weaponry as they came back through the crossing-point of light.

Maybe they cranked up HAARP and wrung all kinds of things out of the fabric of space-time. Were some of them even holographic demonstrations coupled to psychological warfare tests?

However, one thing that is incontrovertible, and that is that meteors do not fly slowly in precision formation - slowly enough to allow themselves to be filmed by an unsuspecting cameraman.

And whatever happened in El Paso, Tx was clearly related to the later events in California, because the original cover story encompassed both geographic areas, and was only abandoned when it was perceived by the general public to be patently absurd. And all the skunky establishments in New Mexico rooted in UFO lore over the ages are only a stone's throw to the west of El Paso, Tx.

Oh - and NORAD, with billions of dollars worth of satellites and computers, saw nothing for the hour and a half in question, yet a cameraman with a simple video camera was able to capture the objects on video!

Stay tuned.

Tony Craddock

21 March 1998

Los Alamos National Laboratory Los Alamos, New Mexico 87545 public information group news release

CONTACT: James E. Rickman, 505-665-9203 (96-201)

When it comes to detecting meteors, Los Alamos researcher is all ears

SAN FRANCISCO, Dec. 18, 1996 - Chicken Little might have liked Los Alamos National Laboratory researcher Doug ReVelle, a guy who keeps an "ear" to the sky listening for falling objects that travel many times faster than the speed of sound.

And each year at least one fairly large extraterrestrial object comes rumbling into Earth's atmosphere, said ReVelle, who presented information about using very low-frequency sound waves to detect meteors today at the American Geophysical Union's Fall Meeting in San Francisco.

ReVelle and colleagues Rod Whitaker, Tom Armstrong and Paul Mutschlecner work in the Comprehensive Test Ban Treaty International Monitoring System infrasound program in Los Alamos' Earth and Environmental Sciences Division.

Using data from Los Alamos listening stations originally set up to monitor underground nuclear explosions, ReVelle, a meteorologist in Los Alamos' new Atmospheric and Climate Sciences Group, hears the infrasonic signature created when meteors enter the atmosphere - even if no one is around to see them. The Los Alamos stations, around since 1983, still are enlisted in the nation's nuclear non-proliferation efforts, but have provided a way for scientists to gain insight into the proliferation of bolides, larger-than-average space debris that slams into Earth's atmosphere and creates brilliant fireballs in the sky.

"Each year, we see at least one object entering the atmosphere that's about six meters in diameter," he said. "These make an infrasonic signal similar to what you'd see from a 15-kiloton explosion, an explosion of 15,000 tons of TNT, depending on the object's velocity and density. And each year we see around 10 objects entering the atmosphere that are equivalent to a one-kiloton blast - or about two meters in diameter."

ReVelle often speaks of meteor size in terms of explosive yield because meteors and nuclear tests have something in common: Each creates a sound/pressure wave in the atmosphere that can be "heard."

"Infrasonic waves are very low frequency sounds that exist

somewhere in the realm between hearing and meteorology," ReVelle said. "These sounds are well below the range of human hearing, which ends at about 30 Hertz, but actually can be detected as small changes in atmospheric pressure. If you had a barometer that was sensitive enough, you'd be able to see fluctuations of several microbars when the waves arrive."

The United States Air Force operated a network of stations to listen for nuclear weapons tests. The network was the nation's first line of warning during the 1960s and early 1970s - until the rise of the satellite era - ReVelle said. With the array, scientists could determine the size and origin of the infrasonic waves.

And in the early days of listening for nuclear weapons, the arrival of these very low-frequency sound waves sometimes put the nation on very high alert.

"On Aug. 3, 1963, just before the Bay of Pigs, the stations detected a one-megaton event south of Africa," ReVelle said. "As you can imagine, it must have created quite a stir. It turned out to be a bolide that could have been as large as 25 meters in diameter."

Since infrasound monitoring stations were set up, a number of large events have been recorded, among them:

-- On Sept. 26 and 27, 1962, two separate objects with an equivalent explosive force of 20 kilotons and 30 kilotons (each at least six to eight meters in diameter), respectively, entered the atmosphere above the Middle East .

-- On April 1, 1965, the network detected the Revelstoke Meteorite, an object somewhere around six meters in diameter. The meteorite yielded enough infrasonic and seismic data that researchers were able to plot a trajectory and comb an area of Canadian wilderness in search of the crater. It was never found, but scientists did find about two grams of the object on the ground. The Revelstoke Meteorite was the smallest ever recovered and it was comprised of a very soft material known as carbonaceous chrondrite, which will crumble when lightly squeezed.

-- On February 1, 1994, an object that was about 15 meters in diameter slammed into the atmosphere over the Marshall Islands in the Pacific at a velocity of about 25 kilometers a second. Luckily, the fireball, reported by some witnesses as being brighter than the sun for about a second, most likely came down in the ocean, ReVelle said.

Many large events have been recorded since the 1960s, but 1996 was a particularly good year for fireballs, particularly the nights of Oct. 2 through 4, when nearly a dozen bolides were seen over the Earth.

"The Earth ran into a swarm of these things in October," ReVelle said. "Who knows where they came from; perhaps they were the result of a near-Earth asteroid that had collided with something, maybe the moon."

During that period, at least five separate fireballs were noticed and recorded above California, as well as two above New Mexico and others above the Pacific Northwest. A particularly bright fireball appeared near Little Lake, Calif., on Oct. 3 at around 8:45 p.m. PDT, and could be seen above Los Angeles and San Francisco; about 105 minutes earlier, a fireball had appeared in the skies above New Mexico.

Note: this is blatantly untrue - there are at least sixteen objects that can be seen flying in close formation in the video.

The California bolide - estimated to be about three-quarters of a meter in diameter and detected by three infrasound stations that were nearly 600 miles away and 31 California seismic stations - was seen by more than 200 people. Many actually heard the object.

"Sometimes you'll actually hear a hissing or a buzzing noise and you'll turn around, look and see a fireball," he said. "What you're hearing is more of an electrical disturbance caused by the object interacting with Earth's geomagnetic field. The perturbation travels at nearly the speed of light, while the bolide itself only travels 50 to 100 times faster than the speed of sound, and that's why people were able to turn around and see the thing after they heard it."

The October fireballs above California and New Mexico were the subject of plenty of publicity and speculation. Researchers originally believed that one fireball had entered the atmosphere, skipped back into space, orbited Earth once and re-entered the skies again.

ReVelle's infrasonic data and subsequent reports from ground observers indicate, however, that the fireballs seen that night above New Mexico and California came from two different objects - trajectories indicate that the first bolide didn't enter the atmosphere at an angle that would allow it to skip back out into space.

Still, the events intrigue ReVelle and other researchers at Los Alamos, Sandia National Laboratory, the University of California at Los Angeles and the University of Western Ontario.

"There are a number of questions left to be answered about the Oct. 3 fireballs," he said, "and there are some things which don't quite add up. You know, I'm not really sure what was happening in the sky that night."

(It's amazing how, after all the precision analyses, suddenly a

fog descends over the October 3rd events again!)

The four arrays of listening stations operated by Los Alamos - the only such network left in regular operation in the world - can detect meteors that are as small as a few centimeters in diameter. The stations are useful because they can help validate other non-proliferation and verification techniques, and they cost very little to operate and maintain.

"In the realm of non-proliferation, it's a very inexpensive insurance policy, and the array gives us a tremendous opportunity to learn about meteors and atmospheric phenomena as well," ReVelle said.

Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy.
