

XZXXZXXZXXZXXZXXZ 29 Chelsea Drive

X

15

1961, Oct. 2

Mr. O. A. Havran,
7414 Laura Koppe
Houston 28, Texas.

Dear Mr. Havran:

I have no doubt but what you saw the same fireball so widely reported up here; the Dallas moon-watch team timed it quite accurately at 10.08 p.m. and a fraction. I can explain the visibility thru clouds only on the assumption that they were not thick enough to block out this light, and as you say, red would be transmitted best (infra-red you could not see).

It gets to be very difficult to identify the different parts of such a phenomenon as seen from various points. I have now traveled practically around the entire path, Ft. Worth to Dallas to Terrell to Greenville to Bonham to Denison to Sherman to McKinney and back to Fort Worth.

I think the earlier part of the path went nearly over Terrell. The meteor was bearing just a little west of north in its descent, and I know that near the end it went almost directly over Whitewright and Bells. Just a few miles north of Bells, between it and the tiny settlement of Ambrose, there was apparently a final explosive burst.

There had, however, been a number of flare-ups or brightenings earlier in the path, and I am not entirely sure it was the last one that was the brightest intrinsically. The Dallas Morning News of about Sep. 12 or 13 published a 1/300 sec. exposure a boy at Mesquite took, and it shows a final biggest burst or flare, but we have no way of knowing whether this was the last one or whether other bursts occurred after he snapped the photo. I talked to him personally, and he thought the light was brighter before he took the picture than at that moment.

So I don't really know where the blinding general flash occurred. If it was not at the very end of the path but nearer the middle, then the red ball you saw descending was the rest of the flight

We have a lot of reports of breakage in various degrees, one observer from Tyler insisting on a "dual" train, and many reporting two to seven larger objects breaking out at the end. Near the terminal point, observers report final breakage into literally hundreds or thousands of spark-like fragments, perhaps in addition to a few bigger ones.

I do have about three reports of a terminal ball going forward from the final explosion point north of Bells. We have the path closely defined in here by observers on each side of it, but the terminal ball has not been traced precisely. I think it represents a large meteorite that fell in the Red River bottoms. We have been visiting people in there on the Texas side urging them to watch for pieces, and if not successful will move on over to the Oklahoma side.

I have some doubts whether this last very low ball would be the same as the one you saw from Houston, but perhaps it is. In any case, remember that all parts of the fireball, and each outburst, probably represent largely evaporating or illuminated gases, perhaps even ionization phenomena doubtless some miles in width but with only a small core of one or more solid bodies.

One small meteorite of less than 2 ounces has so far been turned over to us and it struck a roof about 3 miles west of Bells. It presumably represents a kick-back piece from the last explosive burst, and I think the countryside for a radius of 3 to 5 miles there is covered with tiny fragments of this meteorite, but there is noway to predict the sizes. I fear they are grape-seed to pecan size in the main, with only a few fragments in the ounces and not many in the pound category.

I base this opinion on the fact that the meteorite is of the variety known as a carbonaceous chondrite and is quite crumbly. This may be one reason for the intense illumination—the object shattered badly and repeatedly as it came down, each time exposing much surface area to evaporation and destruction. We have hopes of a few large pieces surviving, but even then I wonder if they would stay whole and penetrate a bit upon hitting the ground, or whether they would shatter on the ground that was so hard and dry before the rains from Carla.

Frankly, I doubt if there is piece over 25 or 50 pounds, and would myself extremely fortunate if we ran down one of those. There may be a few pieces of 5 to 10 pounds. This is all guesswork. I fear it is mostly in pieces of a few ounces, and we may never get any more. We are personally visiting as many people as possible in this region, and circularizing it with request to pick up these black rocks. They look very much like charcoal.

Yours sincerely,