Dr La Paz's attention was direction to an area about 15° west of X-Cygni when by indirect vision he became aware of a very bright green ball (apparent angular diameter 5') to the right of the area in his center field of view which was moving from east to west very low on the horizon. Shouting "Look" to his companions (Maj C. L. Phillips, AF-CAP Liaison Officer, Kirtland Fld., Lt Allan Clark, Intel Officer, N. Mex. Wing CAP, and Inspectors Jeffers and McGuigan, AEC Security Service (Los Alamos, N. M.) who then timed duration of fireball which ranged from 2.1 seconds to 2.3 sec. The path of the green ball was almost exactly horizontal (altitude estimated as only 3 or 4 degrees) until just a tenth of a second or so before it disappeared. During the last one or two tenths of a second of its visibility a slight but definite curvature downward developed in its path. From the very beginning the ball was very bright. Immediate comparison with Serius (at a much greater altitude than the green fireball) indicates that during all but the last one or two tenths of a second of the fireball's visibility it was at least of apparent magnitude -4 (minus four). Just as curvature in its path developed, the magnitude of the fireball rose slightly and it broke up into three or four smaller but still bright green fragments which disappeared almost instantly. Although Lt Clark stopped the car the moment the fireball disappeared and the occupants then stood outside the car and listened for meteoritic detonations or rumblings, nothing was heard. Two night guards at Los Alamos had also witnessed the phenomena simultaneously. The green fireball of December 12th, 9 h 2m plus or minus 30s appeared very near a point with the coordinates latitude 35° 50' longitude 106° 40' and disappeared near a point with the coordinates latitude 35° 45', longitude 107° 5', traversing a nearly or exactly horizontal path with a length of very nearly twenty-five (25) miles at an altitude above the surface of the earth of approximately 8 to 10 miles, depending on the estimate of angular altitude employed in the reduction. The velocity with respect to the earth works out at between 8 to 12 miles a second - depending on the duration estimate used. It should be observed that the above results are obtained under the assumption that the points of appearance and disappearance of the fireball were seen simultaneously by both the Bernal and Los Alamos groups. In case this assumption is not fulfilled, the real path could very easily be no more than 10 to 12 miles long, the velocity with respect to the earth then working out at between 3 and 6 miles a second. While there is thus considerable uncertainty because of the lack of confirming azimuth observations from a third station, the concordance in the five (5) different estimates of angular elevation make it most unlikely that the linear height of the fireball was much less than 8 miles and much more than 10 miles. It is interesting to observe that the backward extension of the 25-mile path first given passes almost centrally across the Los Alamos reservation.

During the entire night of the 12th, meteors of all magnitudes from the first to the fifth and of various colors (with white and yellow predominating and with no evidence of green were occasionally seen emanating from the Geminid radiant. This radiant was well above the horizon even at the time of the Starvation Peak incident. (near Bernal, N. M.) Consequently, the apparent paths of the meteors from the radiant appeared as