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INCLOSURE #6

The University of New Mexico

Albuquerque

Institute of Meteoritics

December 30, 1948

TO: Lt. Colonel Doyle Rees, Commanding Officer
District No. 17
Office of Special Investigations

From: Lincoln LaPaz, Director
Institute of Meteoritics

Subject: Anomalous luminous phenomena (Third Report)

In the second report of this series, a description was given of the real path through the atmosphere of the green fireball of 1948, December 12, 9^h 30^m (plus or minus 30^s). On the basis of corresponding observations made from one station near Starvation Peak, New Mexico, and a second station near Los Alamos, New Mexico, this fireball was found to have appeared near a point with the coordinates: latitude 35° 50' N, longitude 106°, 40' W, and to have disappeared near a point with the coordinates: latitude 35° 45' N, longitude 107° 05' W, traversing an almost horizontal path, at an elevation of about 10 miles above sea level, with a length of about 25 miles, at a velocity of approximately 10 miles per second. (The minimum path length consistent with the observations was found to be about 11 miles, the corresponding velocity then falling between 3 and 6 miles per second, depending on the duration adopted.)

On the basis of corresponding observations of the greenish-white fireball of 1948, December 20, 8^h 54^m p.m. made by two pairs of Los Alamos observers, it has now become possible to work out another approximate real path. As will be apparent from the original accounts of the observations made by AESS Inspectors William D. Wilson, Buford G. Truett, Clifford E. Strang, and Physical Security Inspector George S. Skipper, the fireball of 1948, December 20 was observed under less favorable conditions than the green fireball seen by five persons on the night of December 12. However, on the basis of the original accounts of the observers named above, of sketches supplied by these four individuals on December 29 and of transit observations made by Captain M. E. Nease and the undersigned on the same date at the points of observation (viz., 35° 48' .9, 106° 18' .4 for Strang and Skipper and 35° 55', 106° 23' .9 for Wilson and Truett), it has been possible to establish reasonable concordance between various points on the fireball path as seen by the two groups of observers. Because of the very short baseline (only 8 miles long) between the two points of observation and the difficult conditions under which the fireball of December 20 was observed, it is my opinion that the real path derived from the December 20 observations deserves considerably less weight than that obtained from the December 12 observations.

NOTE 3

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