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d'astrophysique

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May 3, 1977.

Mr. Oscar E. Monnig,
29 Chelsea Drive,
Fort Worth,
Texas 76134.

Dear Oscar:

Thanks very much for your letter with your kind comments about our meteorite find. It was certainly a great thrill to find it and the results will keep us busy for quite a while. We are hoping to give a preliminary report on it at the Meteoritical Society meeting in Cambridge and there will probably be some results from the geological and isotope studies by then also.

The classification of Innisfree is a hypersthene chondrite, probably L5 but possibly L6 the last time we talked with the geologists. Our orbit will stay very much as sketched in Science News but it will take a lot of work and time to get the final small corrections established. We have just completed our first analysis of the photographic light curve which suggests a pre-atmospheric mass near 42 kilograms. More searches were conducted in mid-April after the snow melted and five more pieces were recovered ranging from 33 to 894 grams for a total mass of 3.8 kg. The farmer and his helpers found 3 pieces, a university team found one and our staff from Saskatoon found another one. We think we can probably identify four or five of the recovered pieces with individual fragments seen on the best photographs, where we see five fragments surviving between 20 and 25 km in height. If so, then we would suspect that all the pieces larger than about 200 grams have been found. All the pieces were found within an area of only 400 x 500 metres, very small because the radiant was high in the sky and the atmospheric winds were essentially a tail-wind, keeping the pieces closer together.

I am planning to give a paper on the orbit, etc., at the Meteoritical Society in Cambridge and there may be a combined publication of several papers later on in some journal yet to be selected.

With best regards,

Yours sincerely,

Ian Halliday,
Planetary Sciences Section.

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