

INTRODUCTION

Samples have been examined from a large piece of ferrous material, found at Les Ecureuils, Quebec, in June 1960. The material is thought by some investigators to be of extra-terrestrial origin, either meteoric or from a space vehicle, since it was found shortly after the reported sighting of a large meteorite-like object in the sky. Several examinations, most of them limited in scope, have been made on samples from the main piece and conflicting results have been obtained. An investigation by CARDE at Val Cartier, Quebec, concluded that the metal was of terrestrial origin and was a manganese steel. But doubt has persisted and the material has been widely quoted as being of extra-terrestrial origin. This report has been prepared at the request of Dr. P. M. Millman, of the Upper Atmosphere Research Group of NRC, to try to clear some of the confusion surrounding the material.

THE MAIN PIECE

The main piece was found on the tidal flats of the St. Lawrence River at Les Ecureuils, Quebec, in June of 1960. It is now in the possession of members of the Ottawa New Sciences Club. It is metallic, roughly saucer-shaped, about 4 feet across, with a flat top and very rough edges and bottom. The whole is very rusty and has many small particles adhering to it. It is reported to weigh about 3,000 pounds. No precise measurements of size or weight were made. The following points were noted:

- 1) There is what appears to be a piece of pipe about 10 inches in diameter embedded in the centre of the piece and projecting from the top surface. There is a smaller object like another piece of pipe next to it.
- 2) The structure of the piece is layered. There are two principal interpenetrant layers, one magnetic, the other non-magnetic. There are numerous thinner layers, mainly of non-magnetic metal.
- 3) The non-magnetic material hardened considerably when sawn with a hacksaw, but it was possible to saw it by avoiding dragging the saw blade across the metal on the return stroke. This behaviour corresponds to that of an austenitic manganese steel and is in keeping with some of the previous analyses. The magnetic metal could be sawn without difficulty in the normal way.
- 4) Pieces of both layers were knocked off the main piece with a sledge hammer. The fracture surfaces of the two layers were different, the magnetic metal showing much larger facets than the non-magnetic layer.