

Upon completion of final identifications, all data were transferred to IBM cards, preparatory to analysis.

ANALYSIS OF THE DATA

*Not a simple
classification*

Broadly stated, the problem at this point consisted of the judicious application of scientific methods of categorizing and analyzing the subjective data in reports of sightings of unidentified aerial objects. It was recognized that an approach to this problem could best be made by a systematic sorting and tabulation program to give frequency and percentage distributions of the important characteristics of sightings. A suggestion that an attempt be made to anticipate all questions that might be asked in the future about a sighting or a group of sightings, and to provide answers, was rejected. The systematic approach also made it possible to develop a detailed reference manual of the attributes of the sightings included in this study.

Thus, at the beginning of the analysis, a detailed plan was developed for sorting, counting, and tabulating the information from the punched-card abstracts of reports of sightings. It was believed at the time, and later substantiated, that the results of the program for sorting and tabulating would serve as a guide for the more sophisticated treatment involving statistical methods.

Also, it was anticipated that any patterns or trends that might be found could be subjected to concentrated study in the hope of discovering significant information relating to the characteristics of "flying saucers". Further, it was believed that these trends could serve as certain of the criteria of validity for any concepts (models) developed in the attempt to discover a class of "flying saucers".

The three parts of this study (1) the sorting and tabulation program, (2) the advanced study of the results of that program, and (3) the investigation of the possibility of conceiving a model of a "flying saucer" from descriptions reported, are discussed in sections entitled "Frequency and Percentage Distributions by Characteristics", "Advanced Study of the Data", and "The 'Flying Saucer' Model".

Frequency and Percentage Distributions by Characteristics

The original conception of this study assumed the availability of sufficient data to describe adequately the physical appearance, maneuver characteristics, range, direction, and probable path of the object or objects observed. However, familiarity with the data, acquired during the

translation and transcription from reports to punched cards, indicated that there would be relatively few specific variables or factors that would yield meaningful correlation studies. Either the original data were too subjective, or the incompleteness of the original reports would seriously reduce the sample of a specific variable.

Preliminary tabulations of various sortings substantiated the impossibility of deriving statistical results from certain variables, such as movement of the observer during the sighting, sound, shape parameter, size, angular velocity and acceleration, appearance and disappearance bearing, initial and final elevation, altitude, and orientation of the object. The statistically usable variables presented in this study include the date, time, location, duration, reliability, and method of observation of the sighting, and the physical attributes of number, color, speed, shape, light brightness, and identification of the objects sighted.

The presentation of frequency and percentage distributions of any of the variables must be interpreted in the light of the sample of incidents represented. For example, the analysis of the reported colors of the objects sighted, based on ALL SIGHTINGS, could lead to misrepresentation of the distribution of the reported color of the objects, because of the multiplicity of reports on some of the phenomena. On the other hand, the percentage distribution of the light brightness reported by each observer is more likely to be correct than a distribution based on one report for each phenomenon. To assure that the most nearly correct presentation was made, and to avoid the possibility of failure to uncover any pattern or trend inherent in the data, the variables were studied on five different bases or samples. These samples, and their numerical relation to each other, were as follows:

ALL SIGHTINGS (all reports)	- 3,201 cards
UNIT SIGHTINGS, all observers	- 2,554 cards
UNIT SIGHTINGS, single observer	- 2,232 cards
UNIT SIGHTINGS, multiple observers	- 322 cards
OBJECT SIGHTINGS	- 2,199 cards

The preliminary tabulations indicated that the samples based on UNIT SIGHTINGS, single observer, and UNIT SIGHTINGS, multiple observers, would not add materially to this study. Accordingly, although the frequency distributions were recorded and are available for study, they are not presented in this report.

The bases of ALL SIGHTINGS, UNIT SIGHTINGS (referring to all observers), and OBJECT SIGHTINGS are presented in Appendix A as Tables A1 through A240. A critical study of these tabulations reveals that there is no apparent change in the distribution of any variable from one basis to another, and that no marked patterns or trends exist in any sample.