

Coding System and Work Sheet

The reduction of non-numerical data to numerical form is mandatory in the machine handling of data. Thus, the selection of the IBM punched-card system for analysis of data forced the adoption of a master coding plan. Since it was impracticable to transfer detailed data of an exact nature from the questionnaire to the IBM card, an intermediate transfer form, coordinated with the master code, was necessary.

The master coding plan was evolved during the early stages of the preliminary analysis of data, and was reviewed by the panel of consultants before use. It was recognized that this system of coding would be the heart of the analysis, that is, the completeness of the facility for translation of data could make or break the study. Accordingly, every conceivable factor that might influence the identification of unidentified aerial objects was included, together with a wide range of variations within each factor. The original coding system (with minor corrections) was used throughout the translation of the original data with marked success. A copy of this system, called CODES, is enclosed as Exhibit B4, Appendix B.

To facilitate the preparation of the punched-card abstract, an intermediate form called the WORK SHEET (later, the CARD BIBLE) was developed. Referenced to both the data from the questionnaire and the system of report identification, the WORK SHEET permitted an orderly transcription of data simultaneously by several people. In conjunction with the CODES, the WORK SHEET was used during the reduction of the original data to code form necessary for transfer to punched cards. A sample is included as Exhibit B5, Appendix B.

After the analysis was under way, it became apparent that the mechanics of machine processing could be improved by incorporating in the IBM card system group classifications of certain factors requiring more than one column for discrete expression. In addition, the inclusion of certain data relating to the evaluation and bearing of the sun with respect to the observer was considered necessary. Finally, a critical examination of certain segments of the data indicated the need for the definition of a new factor relating to the maneuvers of the object or objects sighted. Prior to the start of the analytical study, it had been assumed that a combination of stated factors would, by inference, define the maneuver pattern.

All these additions have been incorporated in a revised set of CODES and CARD BIBLE that are illustrated as Exhibits B6 and B7, Appendix B. However, at the time that the maneuver factor was determined to be critical, it was physically impracticable to make the required definitions and re-evaluate the original data. Therefore, no code for maneuverability has been included in the CODES, CARD BIBLE, or IBM cards.

Identification of Working Papers

The actual reduction of data to IBM punched-card form presented a problem of mass transfer of figures by several workers. Recognizing that an orderly system of relating the original data to the questionnaire, the WORK SHEET, and the IBM card was imperative, a scheme of SERIAL NUMBERS was developed to answer this need.

The first data consisted of a series of letter-file folders identified by the year and location of the sighting or sighting* they contained. The number of reports of sightings in a single folder varied from 1 to over 20. Under these conditions, there was a great possibility for incorrect transcription of data, duplication of transcription, or misplacement of intermediate forms. Further, it was considered desirable to relate all sightings of the same object or objects to one another. The concept of a four-digit serial number (major), followed by a two-digit subserial number (minor), was adequate to fulfill these requirements.

To expedite handling of the data, temporary serial numbers were assigned until each report had been evaluated and the phenomenon had been placed in a category of identification. The use of temporary serial numbers permitted the consolidation of duplicate reports from apparently diverse sources, such as a teletype message and an Air Force Form 112. However, this consolidation was made ONLY when it could be proved conclusively that the sources of the two documents were one and the same. Factors of the observer's location, date and time of observation, description of the phenomenon, and finally, the name of the observer were considered. In this manner, the assignment of major serial and minor subserial numbers in continuous series was made only to the reports accepted for the statistical study. It is believed that the reports accepted represent unique and unduplicated instances of sightings.

In the establishment of the serial-number system, it was necessary to define certain terms, so that a standard interpretation could be achieved. The terms and corresponding definitions were:

- OBSERVER - Any witness reporting to a proper authority that he had seen unidentified aerial objects.
- SIGHTING - The report or group of reports of the same observed phenomenon that remained unidentified to the observer or observers, at least until reported.