

UNCLASSIFIED

means of propeller lift for each a body, other than by a constant (solid) buoyancy means, could be by rotation of the sphere with translational motion relative to the air or by discharging a stream of air vertically downward. Appropriate flight could be accomplished with a rotating sphere, provided the detailed design problems, including stability and control were worked out. The methods, using a blower system or jets, would require relatively greater amounts of energy and while they could be used for flights of very shortness and duration, would not ordinarily be considered as practical by aeronautical designers.

The obvious explanation for most of the spherical shaped objects is that they are meteorological or similar type balloons. This, however, does not explain reports that they travel at high speed or maneuver rapidly. It is possible that the movement of the objects was some kind of an optical illusion, or that movement for a brief period due to a gas leak in the balloon was exaggerated by observers.

#### Balls of Light

No reasonable hypothesis of the true nature of balls of light, such as that reported by Lt. Gervon at Fargo, N. Dakota, has been developed that explains the behavior reported. The most reasonable explanation is that the lights were suspended from balloons, or other means of support, not visible at night, and the slow maneuvers reported are due to illusion.

#### Possibility of Scientific Developments in Advance of Knowledge in This Country

Consideration has been given to the possibility that these unidentified aircraft represent scientific developments beyond the level of knowledge attained in this country. Since this is probably the most advanced of the industrial nations on the earth, and our interest in scientific developments throughout the world is very active, it would be necessary for any other country to conduct research and development work in extreme secrecy for any such project to have reached such an advanced state of development without a hint of its existence becoming known here. The only nation on earth with extensive technical resources which has such field security is the U.S.S.R. An objective evaluation of the ability of the Soviets to produce technical developments so far in advance of the rest of the world results in the conclusion that the possibility is extremely remote. Most of the successful Soviet aeronautical developments have been produced by utilizing experience of other nations, some of them being very close copies, so it is very unlikely that they have developed the propulsion and control devices necessary to make these objects perform as described.

Another possibility is that these aerial objects are visitors from another planet. Little is known of the probabilities of life on other planets, so there is no basis on which to judge the possibility that civilizations far in advance of ours exist outside the earth. The commentary on this possibility by Dr. James Van der Kamp Project in Appendix I indicates that the solution of the mystery connected with the sighting of unidentified flying

UNCLASSIFIED