A

DEPARTMENT OF THE AIR FORCE
Office of Public Information
Washington 25, D. C.

U. S. Air Force Summary of Events and Information Concerning the Unidentified Flying Object Program

The Air Force feels a very definite obligation to identify and analyze things that happen in the air that may have in them menace to the United States and, because of that feeling of obligation and pursuit of that interest, the Air Force established an activity known as the Unidentified Flying Object Program.

This program was established in 1947 when unidentified flying objects were being reported in various parts of the United States. The reports of sightings reached a peak of 1,700 in 1952 and dropped to a total of 429 in 1953.

From a survey of the volume of sightings received by the Air Force, it has been determined that over 80 percent are explainable as being known objects. Generally, sighted objects fall in the category of: balloons, aircraft, astronomical bodies, atmospheric reflections, and birds. All reports of unidentified flying objects result from either radar or visual sightings.

Explanations pertaining to sightings reported from military and civilian radar facilities are as follows:

1. Temperature inversion reflections can give a return on a radar scope that is as sharp as that received from an aircraft. Speeds of these returns reportedly range from zero to fantastic rates. The "objects" also appear to move in all directions. Such sightings have resulted in many fruitless intercept efforts.

To possibly bear out the theory of temperature inversion reflection is an incident which occurred in January 1951 near Oakridge, Tennessee. Two Air Force aircraft attempted to intercept an unidentified "object" and actually established a radar "lock" on the object. Their altitude at the time was 7,000 feet. The unidentified object, according to their radar, appeared to be at an elevation of 10 to 25 degrees from this altitude. Three passes were made in an attempt to close on the object. In each instance the pilots reported that their radar led them first upward and then down toward a specific point on the ground. (One scientific theory holds that light can be similarly reflected from a layer of warm air above the earth. If this proves to be correct, many visual night sightings could be accounted for.)

2. Ionized clouds have caused some unidentified radar returns. Thunderstorms are identifiable by radar and radar returns have also been received from ice formations in the air, balloons, ground reflections, frequency interference between other radar stations, and windborn objects. Obviously, such returns are very difficult to identify, especially when they occur during darkness.

3. The radar screen has picked up birds and in one case a flock of ducks. Flight interceptions proved these phenomena.

An explanation of known types of visual sightings are as follows:

1. Present-day jet aircraft, flying at great speeds and high altitudes, are often mistaken for unknown objects by the untrained observer. Sunlight reflections from the polished surfaces of aircraft can be seen plainly even when the aircraft itself is too distant to be visible. The exhaust of jet aircraft emits a trail and often this is seen rather than the aircraft itself.

2. Weather balloons account for a substantial number of sightings. These balloons, sent to altitudes of 40,000 feet and higher, are launched from virtually every airfield in the country. They are made of rubber or polyethylene, swell as they gain altitude, have very good reflective qualities, carry small lights when launched after dark, and can be seen at very high altitudes.

3. In addition to the ordinary weather balloon, huge 90-foot balloons, which sometimes drift from coast to coast, are used for upper air research. These balloons also have a highly reflective surface and are visible at extreme altitudes.

4. Frequently, unusually bright meteors and planets will cause a flurry of reports, sometimes from relatively experienced observers. At certain times of the year, Venus, for instance, is low on the horizon and will appear to change color and move erratically due to hazy atmospheric conditions. Since the stars are charted and most of their characteristics known, many cases are traced to them. Meteors on the other hand are of rapid single-direction movement and are only visible for a few seconds. Meteor activity is more common at certain times of the year than others, and reports of UFO's have shown a tendency to increase during these periods.

5. Some cases arise which, on the basis of information received, are of a weird and peculiar nature. The objects display erratic movements and phenomenal speeds. Since maneuvers and speeds of this kind cannot be traced directly to aircraft, balloons, or known astronomical sources, it is believed that they are reflections from objects rather than being objects themselves. For example: suppose we would hold a mirror in hand under a light, causing a reflection on the ceiling. Only a slight, quick movement of the hand would result in erratic movements and phenomenal speeds of the reflected beam. Reflections may be projected to clouds and haze both from the ground and air. Many things which are common to the sky have highly reflective qualities, such as balloons, aircraft, and clouds. Accurate speeds are also difficult to determine due to the inability of the reporter to judge distance, angles, and time.

6. Brilliant flashing lights that sometimes appear red and white in color have been reported by observers. This type has been traced to a new lighting system of commercial airlines and military aircraft. Atop the tail section of these aircraft highly reflective red and white flasher type lights have been installed and are many times misinterpreted by the ground observer.

In the analysis and investigation of the radar and visual sightings described, there are some yardsticks which have been established from experience and trends to measure and attempt to determine the source of UFO's. Some of these are general in nature and are subject to change as new scientific and factual information is received. It should be remembered that any object viewed from a great distance appears to be round. Nearly all the sightings reported are described as round and would tend to indicate that most of the objects are at a greater distance from the observer than is generally estimated.

Another misconception centers about photographs of unidentified flying objects. At best the majority of photographs have proven nonconclusive as evidence to this program mainly due to type cameras used. Also, it might be mentioned that because still photographs can be so easily faked, either by using a mock-up or model against a legitimate background, or by retouching the negative, they are worthless as evidence. Innumerable objects, from ashtrays to wash basins, have been photographed while sailing through the air. Many such photos have been published without revealing the true identity of the objects.

More attention is given to moving pictures of unidentified flying objects since they are more difficult to retouch. However, only a very few movie-type films have been received by the Air Force and they reveal only pinpoints of light moving across the sky. The Air Force has been unable to identify the source of these lights because the images are too small to analyze properly. Since ownership of these films remains with the persons taking them, the Air Force is not in a position to give them out.

The difficulty of evaluating reports of all types is based largely upon the lack of basic data surrounding the sightings. The drop in sightings during 1953 is largely due to the increased accuracy and the completeness of reports being received. To be of value, a report should include such basic data as size, shape, composition, speed, altitude, direction, and the maneuver pattern of the objects. Without such information, it is almost impossible to establish the identity of the object sighted. In addition, a recent study has shown a direct correlation between the number of sightings reported and the publicity given to "saucers" by the nation's press.

The Air Force took a further step in early 1953 by procuring Videon cameras for the purpose of photographing this phenomenon. These cameras were distributed to various military installations. This type camera has two lenses, one of which takes an ordinary photograph, and the other has a diffraction grating which separates light into its component parts. This aids in determining the composition of the object photographed. A small number of photographs have been received from this camera; however, only light spots of no detail have been indicated in the photos to date. As more photographs are taken by these observers, it is believed that a great deal of the mystery will be lifted from the program.

The Air Force would like to state that no evidence has been received which would tend to indicate that the United States is being observed by machines from outer space or a foreign government. No object or particle of an unknown substance has been received and no photographs of detail have been produced. The photographs on hand are, at best, only large and small blobs of light which, in most cases, are

It may be concluded from the above and from past experience that no new significant trends have developed out of these cases. There was an increase in public interest which occurred simultaneously with the publication of various books and articles on the subject; however, this trend has been noted several times previously.

In order to overcome the lack of basic data, and to standardize all reports, a detailed questionnaire is now submitted to each person reporting an unidentified aerial object. It is felt that the information thus obtained will lower still more the number of unexplained sightings.

For observers who wish to report unidentified aerial objects, the Air Force would welcome the information. Attached to this report is a brief basic summary form. It would be appreciated if observers would send the completed form to the nearest Air Force base.

If and when new developments turn up in this program, the Air Force will keep the public informed.

PLEASE SEND TO YOUR NEAREST AIR FORCE BASE

DATE: _____

TIME OF SIGHTING: _____

SIZE: _____

SHAPE: _____

COMPOSITION: _____

SPEED: _____

ALTITUDE: _____

DIRECTION OF TRAVEL: _____

MANEUVER PATTERN: _____

COLOR: _____

SOUND: _____

LENGTH OF TIME OBSERVED: _____

SKY CONDITIONS: _____

VISIBILITY: _____

GROUND DIRECTION OF WIND: _____

NAME, AGE, MAILING ADDRESS OF OBSERVER: _____

_____

REMARKS: (General description of what you saw) (use back if necessary)

_____

_____

_____

_____

_____

_____

_____

_____